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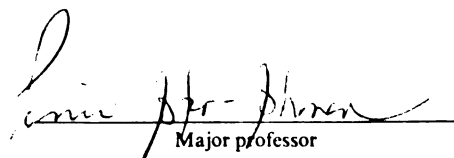
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**ACCULTURATION AND MEXICAN CULTURE: IMPLICATIONS FOR
CULTURALLY APPROPRIATE HIV/AIDS PREVENTION INTERVENTIONS**

By

Christina Urrea Rodriguez

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ABSTRACT

ACCULTURATION AND MEXICAN CULTURE: IMPLICATIONS FOR CULTURALLY APPROPRIATE HIV/AIDS PREVENTION INTERVENTIONS

By

Christina Urrea Rodriguez

HIV/AIDS prevention strategies are not very effective with Latinas because gender and cultural factors are not typically considered in these programs (e.g., Amaro, 1995). Yet, few empirical studies have identified which aspects of Latino culture are associated with risky sexual behaviors (e.g., Amaro, 1991). This study examined how acculturation, through religion and sexual gender norms, leads to HIV sexual risk behaviors among women of Mexican descent. This study also examined the potential role alcohol and a partner's sexual gender norms may have on risky sexual practices. Face to face structured interviews with 90 Mexican and Mexican-American women, residing in California, were conducted. The findings from these interviews reveal a more complex relationship, than originally conceived, between acculturation level and risky sexual behaviors. Acculturation level was found to be related to condom use in two very different and paradoxical ways. Contrary to previous research, highly acculturated Mexican and Mexican-American women were less likely to be in sexual relationships where condoms were used. Further, revealing the complexity of this finding, Mexican and Mexican-American women who were more highly acculturated were more likely to have liberal sexual gender norms, and women with liberal sexual gender norms were more likely to be in sexual relationships where condoms were used. Moreover, highly

acculturated Mexican and Mexican-American women were more likely to have engaged in anal sex at least once, and tended to drink alcoholic beverages before sex which was associated with having multiple sexual partners. Additionally, Mexican and Mexican-American women with a strong fate orientation were less likely to be in sexual relationships where condoms were frequently used. The implications of these findings for the creation of culturally appropriate HIV/AIDS interventions are discussed.

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INTRODUCTION

Women comprise one of the largest HIV risk groups in this country (e.g., CDC, 1995; Amaro, 1995). Latina representation within this group is disproportionately large considering that they constitute only 10.3% of the U.S. population of women (U.S. Bureau of the Census, 1996), yet represent 24% of all women with AIDS (CDC, 1995). Furthermore, the proportion of AIDS cases due to heterosexual transmission is greater among Latinas (45%) than White (38%) or African-American (35%) women (CDC, 1996). These statistics demonstrate the need to develop HIV/AIDS interventions that target Latinas (Amaro, 1988b; Amaro, 1995; Romero, Arguelles, & Rivero, 1993; Romero et al., 1997; Weeks, Schensul, Williams, Singer & Grier, 1995).

Many HIV/AIDS prevention efforts have not been effective among Latinas because they have failed to consider gender and cultural characteristics that influence sexual practices within this population (e.g., Amaro, 1991; Amaro, 1995; Gomez & Marin, 1996). AIDS education programs originally developed for white, gay men have been applied to women of color with little success (e.g., Amaro, 1991; Amaro, 1995; Hinojos, 1990; Ickovics & Rodin, 1992; Romero et al., 1993). Unlike the gay community, AIDS knowledge among Latinas has not led to a corresponding reduction in sexual practices that place them at risk for contracting HIV (e.g., Flores-Ortiz, 1994; Ford & Norris, 1993b; Nyamathi, Bennett, Leake, Lewis, & Flaskerud, 1993; O'Donnell, San Doval, Vornfett, & O'Donnell, 1994). Hinojos (1990) argues that prevention efforts with gay men were effective because many gay men were educated, and had access to health care. In contrast, cultural factors within the Latino community, such as

religion and sexual gender norms that impact sexual behavior, may supersede any knowledge-based efforts to change sexual risk behaviors (Amaro, 1995; Gomez & Marin, 1996; Mays & Cochran, 1988). Therefore, in order to effectively reach Latinas, HIV/AIDS prevention efforts must consider the cultural factors that contribute to sexual decision making within this population (e.g., Amaro, 1991; Amaro, 1995; Land, 1994; Marin, 1993; Mays & Cochran, 1988; Romero et al., 1993; Romero et al., 1997; Weeks et al., 1995). However, few empirical studies have attempted to identify and understand which Latino¹ cultural beliefs and practices influence HIV sexual risk behaviors among Latinas (Amaro, 1988b; Amaro, 1991; de la Vega, 1990; Marin, Tschann, Gomez & Gregorich, 1998; Mikawa et al., 1992).

An important first step in conducting research on Latinos is the examination of intragroup differences, which impact cultural attitudes and beliefs (Marin, 1993; Marin & Marin, 1991). Among these differences, acculturation level is a critical factor to consider when designing culturally appropriate interventions (Amaro, 1991; Marin, 1993; Marin, Tschann, Gomez, & Kegeles, 1993; Romero et al., 1997). Acculturation is the process by which attitudes and beliefs of immigrant groups change due to exposure to a new culture (e.g., Marin & Marin, 1991). The process of acculturation is affected by many factors (e.g., place of residency, education, number of years in new country, citizenship, etc.) which result in a range of acculturation levels among Latinas (Cuellar, Arnold, & Maldonado, 1995; Jimenez, 1987; Pavich, 1986). For example, a Latina born

¹ For the purpose of this paper, Latino(s) refers to Latino men and women. Latinas refers to women.

and raised in the United States will probably be more acculturated to American culture than a recently immigrated Latina, who was born and raised in Mexico. This suggests that the endorsement of Latino cultural beliefs and attitudes will be affected by a Latina's level of acculturation (Marin & Flores, 1994; Mikawa et al., 1992; Romero et al., 1997).

The existing literature on Latinas and HIV/AIDS has uncovered differences in sexual risk behaviors due to acculturation level (e.g., Marin & Flores, 1994; Romero et al., 1997; Sabogal, Perez-Stable, Otero-Sandoval & Hiatt, 1995). Although several Latino cultural beliefs and attitudes have been cited as possible explanations for these differences, the literature has yet to empirically determine how level of acculturation leads to different HIV sexual risk behaviors for particular acculturation groups (Amaro, 1991). Considering the discouraging results of prior HIV/AIDS prevention efforts with Latinas (Amaro, 1991; Amaro, 1995; Hinojos, 1990; Ickovics & Rodin, 1992), understanding how acculturation level impacts the sexual practices of this population may be a key component in developing effective and culturally sensitive interventions (Amaro, 1991; Land, 1994). For example, current HIV/AIDS prevention strategies that promote the use of a condom may not be effective with less acculturated Latinas due to adherence to traditional sexual gender norms, which place constraints on their sexual roles (e.g., Gomez & Marin, 1996; de la Vega, 1990; Worth, 1989). In contrast, this cultural barrier is less likely to be encountered by highly acculturated Latinas since they are likely to have more liberal sexual gender norms and have more freedom in their sexual conduct (Marin & Flores, 1994; Romero et al., 1997). This implies that

differences due to acculturation level may undermine the effectiveness of a universal strategy of AIDS prevention directed toward Latinas, and indicates that different intervention strategies may be necessary for different acculturation levels (Amaro, 1988b; Amaro, 1991; Land, 1994; Marin, 1993; Mikawa et al., 1992; Nyamathi et al., 1993; Romero et al., 1997). Yet, in order for this to occur, a better understanding of how acculturation level impacts Latinas' sexual practices is essential in developing effective HIV/AIDS prevention interventions for this population.

National origin or background is another critical intragroup difference to consider when designing culturally sensitive HIV/AIDS interventions (Deren, Sheldlin & Beardsley, 1996; Land, 1994; Marin, 1993; Moore, Harrison, Kay, Deren, & Doll, 1995; Romero et al, 1993). Mexicans, Puerto Ricans, Salvadoreans and Peruvians are a few of the subgroups that exist in the Latino community. Each Latino subgroup has different cultural, social and economic characteristics that distinguish one group from another. Furthermore, each subgroup has had different immigration experiences and different influences on their documentation status (i.e., legal or illegal) in the United States. Given that these experiences "impact an individual's perceived personal power," and a Latina's "ability to effect changes in her life" (Romero et al, 1993, p.5), it is critical to examine the role of subgroup differences on Latinas' sexual decision making.

While the literature has stressed the significance of subgroup membership in examining cultural differences, current HIV/AIDS studies have rarely considered the influence of different Latino cultures on high risk sexual behaviors among Latinas (Amaro, 1991; Deren et al., 1997; Romero et al., 1993). The majority of research has

categorized all Latinas into one homogenous group, or have acknowledged the different subgroups within their sample, but have been unable to compare across subgroups due to the composition of their sample (i.e., the majority of participants belong to one specific subgroup and a smaller portion of their sample belong to other Latino subgroups).

Considering the diverse modes of HIV transmission among different Latino subgroups (Diaz, Buehler, Castro, & Ward, 1993; Selik, Castro, Pappaionau, & Buehler, 1989), a better understanding of individual Latino cultures and their effect on HIV sexual risk behaviors is vital in the creation of culturally appropriate interventions (Amaro, 1988b; Amaro, 1991; Deren et al., 1996; Deren et al., 1997).

Therefore, the purpose of this study was to begin to identify which cultural factors impact HIV sexual risk behaviors among women of Mexican descent (i.e., a Latino subgroup), and how level of acculturation contributes to this relationship. By only focusing on Mexican and Mexican-American women, one can begin to document the cultural nuances that make this Latino subgroup distinct, and potentially, place them at risk for HIV/AIDS. Moreover, given the dearth of research on the sexual practices of adult Mexican and Mexican-American women (Romero et al., 1993), and the number of AIDS cases due to heterosexual transmission among this population (Diaz et al., 1993; Selik et al., 1989), this study focused on this subgroup of women to better understand the cultural factors that contribute to their sexual risk for HIV.

In this study, two cultural mediators were investigated that might explain how acculturation level is related to risky sexual behaviors of women of Mexican descent. The first mediator was religion. Religion is an influential factor in the lives of many

Mexican and Mexican-American women which has the potential to affect their sexual behavior (e.g., Catholicism prohibits the use of birth control) (de la Vega, 1990; Romero et al., 1997; Worth, 1990). Yet, the importance of religion may diminish as a woman acculturates to American culture (Gonzalez & LaVelle, 1985; Marin & Gamba, 1990; Nyamathi, Flaskerud, Bennett, Leake & Lewis, 1994), indicating that a better understanding of religion's influence on the sexual practices of Mexican and Mexican-American women may assist in developing effective prevention messages for this population. For example, it may clarify whether or not prevention strategies should be concerned with Catholicism's ban on the use of condoms for Mexican and Mexican-American women.

The second mediator examined was sexual gender norms. The impact of this cultural factor is complex because the endorsement of certain sexual gender norms may lead to different risky sexual behaviors (Romero et al., 1997). For example, women with liberal sexual gender norms may acquire sexual freedom from gender role restrictions, which may result in her and her partner using condoms, but also suggests that she may engage in other risky sexual behaviors, such as anal sex and multiple sexual partners that potentially place her at risk for HIV. In contrast, women with traditional sexual gender norms may be less likely to have multiple partners and/or engage in anal sex due to adherence to conservative gender roles. However, it also suggests that she may not be in a position to negotiate the use of a condom which may result in her and her partner engaging in unprotected sex. Given that acculturation is related to different sexual risk behaviors among Latinas (e.g., Marin & Flores, 1994; Romero et al., 1997), sexual

gender norms could be the critical factor that explains how a Latina's level of acculturation leads to different HIV sexual risk behaviors.

This study also examined two moderators that might provide some insight into other contextual factors that lead to risky sexual practices among Latinas. Specifically, this study examined the moderating influence of alcohol use and a partner's sexual gender norms on the relationship between a woman's sexual gender norms and risky sexual behaviors. With regard to the use of alcohol, this study speculated that Latinas who experienced gender norm incongruity (i.e., conflict between cultural and mainstream gender norms) were more likely to drink before sexual intercourse to alleviate this conflict. It was also expected that Latinas experiencing gender norm incongruity were likely to have traditional sexual gender norms, and when under the influence of alcohol would engage in risky sexual behaviors that were atypical of them.

The second moderator was a partner's sexual gender norms. This study hypothesized that a partner's sexual gender norms would moderate the relationship between a woman's sexual gender norms and the use of condoms. Specifically, this study proposed that this moderating effect would result in unsafe sex (i.e., condoms not being used) for Latinas with liberal sexual gender norms who had partners with traditional sexual gender norms. The premise for this moderating relationship is that a Latina with liberal sexual gender norms may feel constrained in discussing the use of a condom with her partner, when she believes her partner has traditional sexual gender norms. This barrier emerges because of fear or concerns that her partner may consider her forward and/or "loose" (Gomez & Marin, 1996; O'Donnell, San Doval, Vornfett, &

DeJong, 1994; O'Donnell, San Doval, Vornfett, & O'Donnell, 1994; San Doval, Duran, O'Donnell, & O'Donnell, 1995; Worth & Rodriguez, 1987). Therefore, a partner's sexual gender norms were expected to moderate and lead to unsafe sex when a Latina had liberal sexual gender norms and her partner had traditional sexual gender norms. While a partner with liberal sexual gender norms may have a moderating influence for Latinas with traditional sexual gender norms, this interaction is most likely to lead to the use of condoms. Given that the use of condoms can reduce a woman's sexual risk for HIV (e.g., Amaro, 1995; Hinojos, 1990), a greater understanding of which factors serve as barriers or contribute to the use of condoms is imperative.

In conclusion, this study addressed two research questions: 1) To what extent does acculturation level lead to different HIV sexual risk behaviors? and 2) How does acculturation level lead to these different risky sexual practices? With Latinas becoming sexually infected with HIV at an alarming rate, it becomes paramount to better understand how acculturation level affects sexual risk behaviors (Gomez & Marin, 1996; Romero et al., 1997). Such information could better inform HIV/AIDS prevention efforts, and may help reduce the rate at which Latinas contract HIV.

Literature Review

Importance of Considering Subgroup Membership

Although national origin or background is recognized as a critical intragroup difference among Latinos (e.g., Amaro, 1991; Hinojos, 1990; Jimenez, 1987; Marin, 1993; Marin & Marin, 1991), very little research has specifically examined the influence of subgroup membership on Latinas' high risk sexual behaviors (e.g., Amaro, 1991).

While the literature examining this relationship is scarce, research does suggest that there are differences among Latino subgroups on their use of condoms. For example, Moore et al. (1995) found that only 7% of the Mexican women in their sample reported that they and their sexual partner always used condoms during vaginal intercourse, compared to 17% of the Puerto Rican women and 21% of the Dominican women. Deren et al. (1997) found that among Latina prostitutes, 53% of the Dominican women always used a condom, compared to 36% of the Mexican women and 10% of the Puerto Rican women. These findings suggest that women of Mexican descent may be at risk for the sexual transmission of HIV due to the infrequent use of condoms in their sexual relationships.

Notwithstanding these studies, research on Latinos and HIV/AIDS has tended to collect data on Latinos as a homogenous population by using the umbrella terms Latino or Hispanic. This trend has served to limit the information available on sexual risk behaviors specific to various Latino subgroups, and thus, has hindered prevention efforts (Amaro, 1988b; Amaro, 1991; Deren et al., 1997; Land, 1994). An illustration of this drawback can be found in epidemiological studies that have examined HIV transmission trends among Latinos (Diaz et al., 1993; Selik et al., 1989). Place of birth and ethnicity are ascertained when cases are reported to the Centers for Disease Control and Prevention (CDC), but the umbrella term of Hispanic is used for all U.S. born Latinos, and no data is collected on their subgroup membership. Although epidemiological studies have been able to determine HIV/AIDS trends among foreign born Latinos, they have not been able to document trends by national background among U.S. born Latinos.

This drawback does not allow for a clear picture to emerge on HIV transmission modes among American born Latino subgroups, which curtails the effectiveness of prevention efforts (Amaro, 1988b).

While epidemiological data on Latinos is limited, it does suggest that HIV transmission modes do vary across subgroups (Chu, Peterman, Doll, Buehler & Curran, 1992; Diaz et al., 1993; Selik et al., 1989). For example, Diaz et al. (1993) found that Dominican (40.5%) and South American women (40%) primarily contracted HIV through sexual contact with an IV drug user. Puerto Rican women were more likely to become infected with the AIDS virus through their own IV drug use (46.4%), followed closely by having sex with an IV drug user (34.8%). Exposure to HIV varied greatly among Cuban women: sex with an HIV positive male partner (19.5%), injection drug use (17.1%), sex with an IV drug user (17.1%) and blood transfusions (14.6%). Similar transmission modes were identified for Central American women. Mexican women primarily contracted the AIDS virus through blood transfusions (33.7%) followed by an undetermined mode of exposure (21.1%) and having sex with an HIV positive male (19.5%). The variability in these findings further support the need to examine subgroup differences among Latinos.

In summary, these findings suggest that there is variability between subgroups of Latinas and their HIV/AIDS risk behaviors. Although these studies indicate that there is variation between subgroups, they fail to explain why these differences emerge. In order to better understand how subgroup cultures influence these types of differences, studies need to be conducted that focus on one specific Latino subgroup at a time. This will

allow for a more thorough exploration and understanding of the influence of specific Latino cultures on sexual decision making. This knowledge is important for HIV/AIDS prevention efforts to be effective with Latinos (Amaro, 1991; Deren et al., 1997).

Sexual Risk for HIV within the Mexican and Mexican-American Community

Many Latinas are at risk for HIV/AIDS due to unprotected heterosexual intercourse (Moore et al., 1995). With a significant number of HIV positive Mexican men (68.6%) having contracted the AIDS virus through sex with other men, it is argued that Mexican women may be exposed to HIV through the bisexual behavior of their male sexual partners (Chu et al., 1992; Diaz et al., 1993). This supposition may accurately pinpoint the manner in which many Mexican women are becoming sexually infected with HIV, given that epidemiological data states that 21% of Mexican women with AIDS do not know how they were infected and another 19% were infected by an HIV positive male whose mode of transmission is undetermined (Diaz et al., 1993). Moreover, since Mexican and Mexican-American women and their sexual partners infrequently use condoms, sexual transmission of HIV is likely (Moore et al., 1995). Therefore, it is imperative to determine the factors that influence the risky sexual practices of these women. Cultural factors are particularly important given their strong influence on Latinas' sexual behaviors (Land, 1994; Pavich, 1986; Worth & Rodriguez, 1987). Uncovering the role of culture in the sexual lives of this population will provide a greater understanding of the factors that contribute to sexual behaviors that put Latinas at risk for HIV (e.g., Amaro, 1991). Given that a Latina's level of acculturation influences the importance of Latino culture (Jimenez, 1986; Mikawa et al., 1992;

Romero et al., 1997), a first step in understanding the role of culture on HIV sexual risk behaviors is an examination of acculturation.

Acculturation

Acculturation level is an intragroup difference that significantly influences the cultural beliefs and practices of Latinos (Marin & Marin, 1991; Marin, 1993).

Acculturation is a process by which native cultural beliefs and customs are modified, and/or new ones are adopted due to a group's interaction with another culture (e.g., Cuellar et al., 1995; Mendoza, 1989). In other words, acculturation is the means by which cultural change occurs among immigrant and minority groups as they come into contact with a new group. Several factors have been identified by researchers as critical markers of the acculturation process among Mexicans and Mexican-Americans (e.g., Cuellar et al., 1995; Marin, Sabogal, Marin, Otero-Sabogal, & Perez-Stable, 1987). These indicators are used to assess the degree to which Mexican and Mexican-Americans have acculturated to American culture.

One such factor is the use of language. As Mexicans and Mexican-Americans come into contact with U.S. mainstream society, they are more likely to speak English than Spanish in order to communicate. This tends to be one of the first cultural changes that occurs as a result of acculturation (Cuellar et al., 1995). Given this information, several researchers have used language alone to measure level of acculturation among Latinos (e.g., Marin & Marin, 1990; Marin & Posner, 1995). For example, Latinos that have minimal contact with mainstream society are likely to only speak Spanish, and therefore, are considered less acculturated. In contrast, Latinos that have extensive

interaction with Whites and other ethnic groups are more likely to speak English, and therefore, are considered highly acculturated.

Another factor that is used as an indicator of acculturation level is ethnic interaction (e.g., Cuellar et al, 1995, Marin et al., 1987). As Latinos begin to interact with Whites and people from other racial and ethnic backgrounds, they are more likely to be exposed to other cultural beliefs and customs. The interaction with other groups potentially leads to the modification and/or adoption of new values, attitudes and beliefs among Latinos (Garza & Gallegos, 1995; Olmedo & Padilla, 1978; Teske & Nelson, 1974; Williams & Berry, 1991). In other words, they are likely to experience acculturation. Thus, Latinos who have minimal interaction with other racial and ethnic groups are considered less acculturated, and Latinos with extensive interaction with other groups are considered highly acculturated (Cuellar et al., 1995; Marin et al., 1987).

Furthermore, ethnic identity and cultural traditions are used to assess a Latino's degree of acculturation (Cuellar et al., 1995; Cuellar, Harris, & Jasso, 1980). "Ethnic identity is a virtually meaningless concept" for groups that belong to an "ethnically or racially homogenous society" (Phinney, 1990, p. 501). However, considering that Latinos are a subgroup of the larger U.S. society, their ethnic identity and/or cultural heritage become more salient characteristics. In fact, researchers have focused on these factors as indicators of acculturation level due to their saliency (Berry, 1980; Cuellar et al., 1995). Although these characteristics are significant in the lives of many Latinos, they are subject to change as their interaction increases with mainstream society (Berry, Kim, Minde, & Mok, 1987; Clark, Kaufman & Pierce, 1976; DeVos & Romanucci-

Ross, 1982). Hence, Latinos that identify themselves solely as “Latinos” are considered less acculturated, and Latinos that identify as “Americans” are considered highly acculturated. Further, Latinos that maintain cultural traditions such as cooking and eating Latino foods are regarded as less acculturated, and Latinos that do not foster Latino traditions are regarded as highly acculturated.

These four indicators (i.e., language, ethnic interaction, ethnic identity and cultural traditions) are typically used to classify Latinos into three acculturation groups: low, moderate and high (e.g., Marin & Marin, 1991). Mexicans and Mexican-Americans that are considered low in acculturation tend to speak Spanish, primarily interact with other Latinos, identify ethnically as Mexican, and tend to uphold traditional Mexican customs (Jimenez, 1987; Pavich, 1986). Moderately acculturated Mexicans and Mexican-Americans are more inclined to be bicultural. They maintain aspects of both Mexican and American culture, tend to be bilingual, and are inclined to identify as Mexican-Americans (Jimenez, 1987; Pavich, 1986). In contrast, highly acculturated Mexicans and Mexican-Americans have assimilated to mainstream society. They tend not to follow Mexican customs, primarily speak English, and tend to identify as Americans (Jimenez, 1987; Pavich, 1986).

Given that the process of acculturation leads to the integration of new cultural norms and practices, it is not surprising that acculturation level is associated with changes in Latino cultural attitudes, beliefs and behaviors. For example, acculturation level has been found to be negatively related to Latino cultural social norms (e.g., Canino, 1982; Gonzalez, 1982; Kranau, Green, & Valencia-Weber, 1982) and Latino

cultural values (e.g., Domino & Acosta, 1987; Sabogal, Marin, Otero-Sabogal, Marin, & Perez-Stable, 1987), suggesting that as Latinos acculturate to American culture, they are less likely to endorse Latino cultural beliefs and values. Acculturation level has also been found to be positively related to the use of alcohol (e.g., Caetano, 1987; Gilbert, 1991; Marin & Flores, 1994) and the consumption of cigarettes among Latinas (e.g., Marin, Perez-Stable, & Marin, 1989; Marin, Marin, Otero-Sabogal, Sabogal & Perez-Stable, 1989), indicating that highly acculturated Latinas are more likely to engage in non-traditional behaviors for women. That is, they are less likely to follow traditional Latino gender role behavior. This range of beliefs and behaviors due to acculturation begets the question of how to best design HIV/AIDS prevention interventions for this community. It implies that a general message of prevention may not be practical with this population due to differences in language, culture, and behavior (Jimenez, 1987; Marin, 1993; Worth & Rodriguez, 1987). In fact, the heterogeneity of this group suggests that a better approach for prevention may be the development of group-specific interventions for different acculturation levels (Marin, 1993; Mikawa et al., 1992).

The influential role of acculturation level in the lives of Latinos is well documented in the literature investigating risky sexual behaviors (e.g., Flaskerud, Uman, Lara, Romero & Taka, 1996; Ford & Norris, 1993a; Marin & Flores, 1994). For example, research demonstrates that highly acculturated Latinas are more likely to engage in risky sexual behaviors such as engaging in anal sex and having multiple sexual partners, compared to less acculturated Latinas (e.g., Marin, Gomez & Hearst, 1993). Less acculturated Latinas and their partners tend to infrequently use condoms, compared

to highly acculturated Latinas and their partners (e.g., Ford & Norris, 1993a). This suggests that both less acculturated and highly acculturated women are engaging in sexual behaviors that place them at risk for HIV (Romero et al., 1997). Moreover, it indicates that different acculturation levels are associated with different risky sexual practices. To begin to understand how these differences occur, an examination of the existing research on acculturation level and HIV sexual risk behaviors is detailed below.

HIV Sexual Risk Behaviors

A range of sexual activities can place a person at risk for HIV if one is sexually involved with an infected partner (Nevid, Fichner-Rathus & Rathus, 1995). One such activity is unprotected vaginal intercourse; the primary mode of sexual transmission of HIV among women (Amaro, 1995; Bezemer, 1992; Osmond, 1990). Vaginal sex without the use of a condom is considered a high risk sexual behavior for a woman. HIV is more concentrated in semen than in vaginal fluids, and semen is likely to remain in the vagina for a few days after intercourse, increasing a woman's chances of becoming infected with HIV (Bezemer, 1992; Nevid et al., 1995). Another manner in which HIV is sexually transmitted is through unprotected anal intercourse (Bezemer, 1992; Osmond, 1990). Unprotected anal sex is a high risk sexual behavior due to the possible exchange of blood and semen (Nevid et al., 1995). The recipient of anal intercourse is most at risk due to the possible tearing of rectal tissue, which may allow for the AIDS virus to enter the bloodstream. Furthermore, the risk of becoming infected with HIV increases when a person has unprotected sex with multiple partners, because it

raises their chances of coming into contact with an infected person (Nevid et al., 1995).

Given that the predominant mode of exposure to HIV among Mexican and Mexican-American women is sexual contact (Diaz et al., 1993), a better understanding of what sexual risk behaviors they engage in will assist prevention efforts with this population.

Use of condoms

Unprotected vaginal intercourse has been the primary focus of research on Latinas and HIV risk behaviors. Studies have clearly established that Latinas and their sexual partners do not use condoms on a frequent basis (Catania et al., 1994; Deren et al., 1996; Flaskerud & Nyamathi, 1989; Flaskerud et al., 1996; Ford & Norris, 1993b; Ford, Rubinstein & Norris, 1994; Gomez & Marin, 1996; Marin, Gomez et al., 1993; Marin, Tschann et al., 1993; Moore et al., 1995; Sabogal et al., 1995). Latinas and their sexual partners are less likely to routinely use condoms, compared to White and African-American women (e.g., Catania et al., 1994; Norris & Ford, 1991; Sabogal et al., 1995). For example, Norris and Ford (1991) found that among young adults, Latinas (26.1%) and their partners were least likely to have used a condom during their most recent intercourse than were African-American women and their partners (44.3%). Sabogal et al. (1995) found that Latinas were least likely to be in a sexual relationship where condoms were used when compared to White women. Similarly, in Catania et al.'s (1994) study, three-fourths of the Latinas (76%) and their sexual partners never used condoms. This was true for only about half of the White (48%) and African-American (60%) women in their sample. While a handful of studies did find that, compared to White women and their partners, both Latinas and African-American women were less

likely to be in sexual relationships where condoms were used (Catania et al., 1992; Weinstock, Lindan, Bolan, Kegeles, & Hearst, 1993), the fact remains that Latinas and their partners do not use condoms on a frequent basis. Given the low incidence of condom use among Latinas, it is important to explore what might facilitate or contribute to condom use with this population.

Research indicates that acculturation level is a key contributing factor (Ford & Norris, 1993a; Marin & Flores, 1994; Marin, Tschann et al., 1993; Sabogal et al., 1995). For example, Ford and Norris' (1993a) research with young adults indicated that highly acculturated Latinas and their partners were more likely to use condoms than less acculturated Latinas. Marin and Flores (1994) also found that highly acculturated Latinas were more likely to be in sexual relationships where condoms were used on a consistent basis, compared to less acculturated Latinas. Similar results were identified by Marin, Tschann et al. (1993) and Sabogal et al. (1995). These research findings suggest that as a Latina's level of acculturation increases, the likelihood that she and her partner will use a condom also increases.

In summary, compared to women from other ethnic groups, Latinas, particularly those that are less acculturated, may be at a higher risk for the sexual transmission of HIV due to the infrequent use of condoms in their sexual relationships. While it is evident that acculturation level and the use of condoms are positively related, it is not clear how acculturation contributes to this relationship. Additional research is needed to explore this relationship, and reduce the prevalence of AIDS among Latinas.

Anal sex

While Latinas, as a whole, are less likely to engage in anal intercourse (Ford & Norris, 1993b; Erickson et al., 1995), differences do appear among Latinas when level of acculturation is considered (Flaskerud et al., 1996; Ford & Norris, 1993a). For example, Ford and Norris (1993a) found that highly acculturated Latinas and their partners were more likely to engage in anal intercourse than less acculturated Latinas and their partners. Flaskerud et al. (1996) found that as level of acculturation increased, so did the array of sexual behaviors a Latina engaged in, including anal sex. These findings suggest that as Latinas become acculturated to American culture, they are more likely to experiment sexually, and engage in other sexual activities such as anal intercourse. Interestingly, in focus groups conducted by Kline, Kline and Oken (1992), a few Latinas indicated that they had used anal sex as a form of birth control. Considering the high risk involved in engaging in unprotected anal intercourse, a better understanding of the factors that contribute to this behavior is necessary.

Multiple sexual partners

Although Latinas, compared to women from other ethnic groups, are less likely to have multiple partners (Choi, Catania & Dolcini, 1994; Marin, Gomez et al., 1993; Marin, Tschann et al., 1993; Nyamathi et al., 1993; O'Donnell, San Doval, Vornfett, & O'Donnell, 1994), the literature indicates that there are varied sexual practices among Latinas (Flaskerud et al., 1996; Marin & Flores, 1994; Marin, Gomez et al., 1993; Marin, Tschann et al., 1993). For example, Marin, Tschann et al. (1993) found that

21% of the English-speaking Latinas in their sample (proxy for high acculturation level) were more likely to have multiple sexual partners, compared to 5% of the Spanish speaking Latinas (low acculturation level) in their sample. Marin and Flores' (1994) research indicated that highly acculturated Latinas (16%) were more likely to have multiple sexual partners, compared to moderately acculturated Latinas (10%) and less acculturated Latinas (3%). Concurrent results emerged for Flaskerud et al. (1996) and Marin, Gomez et al. (1993). These findings further support the notion that as Latinas become acculturated to mainstream culture, they are more likely to adopt more liberal sexual behaviors, possibly increasing their risk for HIV.

Summary of Acculturation

In summary, the existing research on acculturation level and HIV sexual risk behaviors clearly establishes that Latinas are not a homogenous population. The literature indicates that different sexual risk behaviors emerge between acculturation groups. It appears that less acculturated Latinas may be at risk for HIV due to the infrequent use of condoms by their sexual partners. As level of acculturation increases, Latinas are potentially at risk for the AIDS virus because they are more likely to engage in other high risk sexual behaviors such as multiple sexual partners and/or anal sex. Although more acculturated Latinas are more likely to use condoms than less acculturated Latinas, these results should be regarded with caution, since the overall use of condoms by Latinas and their partners is low. These findings further highlight the need to investigate the factors that contribute to Mexican and Mexican-American women's sexual risk for HIV.

While it is acknowledged that acculturation level is a predictor of HIV risk behaviors among Latinas, few researchers have examined how acculturation level contributes to these differences (Amaro, 1991). Understanding how acculturation level influences risky sexual behaviors will assist in the identification of pertinent cultural variables, which are necessary for HIV/AIDS prevention interventions to be culturally sensitive and successful (e.g., Marin, 1993). With this in mind, this study has targeted two mediating variables that may explain how acculturation level leads to different HIV sexual risk behaviors: religion and sexual gender norms. These two cultural variables were selected because of their potential to directly influence Latinas' sexual behaviors (Maldonado, 1990; Worth, 1990). Furthermore, religion and sexual gender norms play a central role in Latino culture, and are directly related to acculturation level (Gonzalez & LaVelle, 1985; Marin & Gamba, 1990; Marin, Tschann, et al., 1993). More specifically, less acculturated Latinas are more likely to be highly religious, and have more traditional sexual gender norms than highly acculturated Latinas. With AIDS being the fourth leading cause of death among Latinos (Singh, Kochanek, & MacDorman, 1996), it is imperative to better understand how acculturation level influences the risky sexual practices of this population.

Religion

Religion is an integral part of Mexican culture (Cadena, 1995; Isasi-Diaz, 1995; Land, 1994; McCready, 1985). Mexicans and Mexican-Americans are highly religious (Cadena, 1995; Gonzalez & LaVelle, 1985; Marin & Gamba, 1990; Princeton Religious Center, 1988), and receive a significant amount of guidance in their life from their

religion (de la Garza, DeSipio, Garcia, Garcia & Falcon, 1992; Lifshitz, 1990). Many Mexicans and Mexican-Americans are also Catholic (Bach-y-Rita, 1982; Cadena, 1995; McCready, 1985; Mosqueda, 1986), and Catholicism supports conservative religious beliefs, particularly in regard to sexual behaviors (Worth, 1990). For example, Catholicism has prohibitions on the use of birth control, engaging in anal sex, and extramarital sex. Further, although a significant number of Mexicans and Mexican-Americans are Catholic, there has been a recent increase in the United States of Latinos converting to fundamentalist Protestant churches (Amaro, 1991; Cadena, 1995). Similar to the Catholic Church, many of these religions follow conservative religious doctrine on sexual behaviors (Petersen & Donnenwerth, 1997). While it may seem like these religious tenets serve as protective measures against the sexual transmission of the AIDS virus, the ban on condom use by some religions (e.g., Catholicism) can undermine these safeguards, and place religious Latinas at sexual risk for HIV (Lifshitz, 1990; Worth, 1990).² That is, highly religious Latinas may become sexually infected with the AIDS virus due to condoms not being used in their sexual relationships.

Additionally, it is important to note that religious constraints on sexual practices may not be encountered by all Latinas. This differential experience may be due to the acculturation process. Studies indicate that highly acculturated Latinas tend to be less religious (Gonzalez & LaVelle, 1985; Marin & Gamba, 1990), and less religious women tend not to adhere to their church's edicts on sexual conduct (Studer & Thornton, 1987;

² Although religious Latinas may wait to have sex until marriage, if their partner is HIV positive and condoms are not used during intercourse, they are at risk of becoming infected with HIV.

Thornton & Camburn, 1989). This implies that highly acculturated Latinas may experience more sexual freedom because they are not limited by conservative religious doctrine. However, this freedom from religious constraints may have adverse consequences because it may increase the likelihood that highly acculturated Latinas will engage in HIV sexual risk behaviors such as anal sex and/or multiple sexual partners. Determining the extent to which religion influences different HIV sexual risk behaviors may provide for a better picture as to the factors that contribute to the heterosexual transmission of HIV among Latinas. Yet, a limited number of studies on Latinos have advanced our knowledge of religion's influence on risky sexual behaviors (Amaro, 1988b; Mikawa et al., 1992; Organista, Organista, Garcia de Alba, Moran & Carrillo, 1996; Organista, Organista, Garcia de Alba, Moran & Carrillo, 1997; Romero et al., 1997; Worth, 1990). Given this lack of research, this study attempted to explore how two elements of religion (i.e., degree of religiosity and fate orientation) contribute to HIV sexual risk behaviors.

Degree of Religiosity

An important element of religion is degree of religiosity. Religiosity refers to the guidance one receives from one's religion (de la Garza, et al., 1992; Francis, 1997), and the extent to which one participates in religious activities (Cadena, 1995; Kenny, Vaughn & Cromwell, 1977). Research suggests that people who are actively involved in their church and regularly attend religious services are more likely to be familiar with and accept religious dogma due to frequent exposure to "religious messages" about appropriate beliefs and behaviors (Thornton & Camburn, 1989). In fact, studies have

found that religiosity is closely related to an array of conservative attitudes and behaviors. For example, religiosity has been found, among other things, to be associated with attitudes about substance use (Francis, 1997), euthanasia (Gilman, 1997), sociopolitical values (Dillion, 1996), abortion (Emerson, 1996), and behaviors such as the use of alcohol (Amey, Albrecht & Miller, 1996; Bechtel & Swisher, 1992; Hanson, 1974).

Moreover, religiosity has been found to be related to sexual practices (Studer & Thornton, 1987; Thorton & Camburn, 1989; Troiden & Jendrek, 1987; Wyatt et al., 1997). For example, Thornton and Camburn (1989) found that young White women who were less active in their church were more likely to be sexually experienced than women that were active church members. Similarly, Troiden and Jendrek (1987) found that less religiously devout White women were more likely to have engaged in an array of sexual behaviors, compared to those that were highly devout. These findings suggest that as a woman's level of religiosity decreases, she is more likely be sexually active which may increase the likelihood that she will engage in risky sexual practices.

Research has also identified a relationship between religiosity and contraception (Amaro, 1988a; Studer & Thornton, 1987; Wyatt et al. 1997). For example, Studer and Thornton (1987) found that young White women, who regularly attended religious services, were less likely to use effective forms of contraception than women who rarely attended services. Wyatt et al. (1997) found that highly religious African-American women were less likely "to believe that condoms were effective or acceptable in preventing pregnancy or STDs" compared to less religious women. Amaro (1988a)

found that Mexican and Mexican-American women who frequently participated in religious activities were more likely to have negative attitudes about contraception than less religious women. The findings from these studies suggest that religious women may be less inclined to negotiate the use of a condom with their partners due to religious prohibitions about contraception.

To date, only a few studies have examined the relationship between religion and the use of condoms by Latinas and their partners (Amaro, 1988b; Mikawa et al., 1992; Organista, Organista, Garcia de Alba, Moran & Carrillo, 1996; Organista, Organista, Garcia de Alba, Moran & Carrillo, 1997; Romero et al., 1997). Surprisingly, these studies found that religiosity was not related to the use of condoms in a Latina's sexual relationship. For example, Romero et al.'s (1997) study with single and married Mexican and Mexican-American women did not find a significant relationship between religiosity and the use of condoms. Two other studies conducted by Organista et al. (1996; 1997) with Mexican migrant workers found that neither the importance of religion nor being Catholic predicted the use of condoms. Similar results with recently immigrated Latinos emerged for Mikawa et al. (1992). A possible explanation for these findings is that the majority of these studies measured religiosity by asking participants only one question about religiosity such as "How religious are you?", "How frequently did you attend religious services?" or "How important is religion in your life?" Given that religiosity entails much more than simply attending religious services or identifying oneself as religious, additional research assessing different aspects of religious participation and religious guidance is needed to clarify the role of religiosity on the risky sexual practices

of Mexican and Mexican-American women.

Relationship Between Acculturation Level and Religion

Although religion is a significant factor in the lives of many Latinos, the importance of religion has been found to diminish as level of acculturation increases among Latinos (Gonzalez & LaVelle, 1985; Marin & Gamba, 1990). For example, Gonzalez and LaVelle (1985) used place of birth as a proxy for acculturation level, and found that U.S. born Latinos were less likely to feel that religion was an important part of their life compared to foreign born Latinos. Similarly, Marin and Gamba (1990) found that among Latinos, acculturated Catholics were less likely to believe that religion was an important factor in their lives, compared to Catholics that were less acculturated. In addition, Gonzalez and LaVelle (1985) found that Mexican-American Catholics (48%) were less likely to observe religious practices than Mexican born Catholics (76%) (Gonzalez & LaVelle, 1985). The findings from these studies are indicative of the cultural changes that occur due to the acculturation process. In fact, both of these studies suggest that as Latinas become more acculturated to American culture, they are more likely to reject Latino cultural practices such as religiosity.

In summary, the literature indicates that religiosity is associated with sexual attitudes and behaviors that potentially place Latinas at sexual risk for the AIDS virus. First, research suggests that as a woman's level of religiosity decreases, she is more likely to engage in high risk sexual behaviors (e.g., anal sex) that can lead to the sexual transmission of HIV. Second, studies indicate that as a woman's level of religiosity increases, she is more likely to have views that oppose the use of contraception,

particularly the use of condoms which is a primary of mode prevention against the sexual transmission of HIV. Lastly, research indicates that the relevancy of religion in a Latina's life will diminish as a woman's level of acculturation increases, suggesting that the influence of religiosity might vary due to a Latina's level of acculturation. While research with Latinos indicates that a unidimensional measure of religiosity is not related to the use of condoms, additional research with a multidimensional measure of religiosity may explain the actual influence religiosity may have on the use of condoms with this population.

Fate Orientation

Another aspect of religion is fate orientation (de la Vega, 1990; Worth, 1990). Fate orientation is a deep philosophical approach and belief system within the Latino community (Bach-y-Rita, 1982; Worth, 1990). As Bach-y-Rita (1982) describes it, fate orientation is a belief that "God put us on earth, governs our lives, and ultimately takes us from the world . . ." (p.35). In other words, God is omnipotent, and controls one's destiny. This orientation may play an instrumental role in explaining why Latinas are at sexual risk for HIV. Worth (1990) argues that a strong fate orientation can promote a sense of powerlessness that one cannot control what happens in one's life, and may decrease the likelihood that condoms are used by Latinas and their sexual partners, increasing their risk of becoming sexually infected with HIV.³ This suggests that fate orientation is important on two levels. First, it indicates that fate orientation promotes a

³ The literature proposes that only the use of condoms is related to fate orientation.

general feeling that all aspects of one's life are controlled by God. Second, it fosters the sentiment that one cannot prevent the transmission of HIV because one may be destined by God to have AIDS.

While very little research has examined fate orientation in relation to the use of condoms (Mikawa et al., 1992), other research on preventive behaviors has examined a similar construct called a locus of control. Locus of control refers to an expectation that the results of one's actions are under one's own control (i.e., an internal locus of control) or beyond one's control (i.e., an external locus of control) (Travis & Wade, 1995). For example, research on personal health and locus of control indicates that people with an external locus of control are less likely to engage in preventive health behaviors than people with an internal locus of control (e.g., Wallston & Wallston, 1984). This seems to suggest that individuals who believe that God, or others, controls their destiny (i.e., an external locus of control) may not take the precautionary steps necessary to prevent their possible infection of HIV (i.e., using condoms).

Relationship between Acculturation and Fate Orientation

Research with Latinos indicates that there is a negative relationship between acculturation level and fate orientation (Marin, Tschann et al., 1993, Mikawa et al., 1992). For example, Mikawa et al. (1992) found that less acculturated Latinos felt powerless over the transmission of the AIDS virus, compared to highly acculturated Latinos. Similarly, Marin, Tschann et al.'s (1993) results indicated that Spanish speaking (i.e., a proxy for low acculturation) Latinos were less likely to believe they could prevent the transmission of HIV, compared to English-speaking Latinos. The

results from these studies suggest that less acculturated Latinas are more likely to believe that if God intends it, they will become infected with HIV. These findings are not surprising given that less acculturated Latinas are more likely to maintain Latino cultural beliefs compared to highly acculturated Latinas.

Summary of Religion

In summary, degree of religiosity and fate orientation may contribute to Latinas' diverse sexual behaviors, and may explain how acculturation influences risky sexual activity. For example, given that less acculturated Latinas are likely to be religious and fate oriented, religion may contribute to the infrequent use of condoms in their sexual relationships. This may occur for several reasons. First, religious prohibitions against the use of birth control may discourage a less acculturated Latina and her partner from using condoms in their sexual relationship. Second, beliefs that God controls her destiny (i.e., high fate orientation) may cause a Latina to feel powerless over the transmission of HIV, and may deter her and her sexual partner from using condoms. In addition, given that degree of religiosity is likely to decrease among highly acculturated Latinas, it suggests that their sexual behavior may be less likely to be restricted by religious edicts and beliefs. This may explain why highly acculturated Latinas are more likely to engage in other HIV sexual risk behaviors such as anal sex and multiple sexual partners. Overall, these findings suggest that religion may be a factor that helps explain how acculturation level leads to different HIV sexual risk behaviors among Latinas.

Sexual Gender Norms

Gender roles are an important component of a Latino's identity (e.g., Gomez & Marin, 1996; Pavich, 1986). There are two traditional gender roles dominant in Latino culture: machismo and marianismo. Machismo refers to the traditional gender role Latino men are expected to follow (e.g., de la Vega, 1990; Espin, 1995; Mikawa et al., 1992). Machismo consists of a man maintaining the role of "provider" and "protector" of his family (Mikawa et al., 1992). In addition, Latino men are supposed to be dominant, virile, and womanizers (de la Vega, 1990; Espin, 1995; Mikawa et al., 1992). In contrast, marianismo refers to the traditional gender role Latinas are expected to follow (de la Vega, 1990; Singer et al., 1990). This role definition includes characteristics such as modesty, innocence, virginity, submissiveness, and motherhood (e.g., de la Vega, 1990; Espin, 1995; Gonzalez, 1982; Worth & Rodriguez, 1987). It also includes meeting the needs of one's husband and children before one's own (e.g., Nevid et al., 1995).

Both marianismo and machismo hold specific assumptions about appropriate sexual behavior for men and women (e.g., de la Vega, 1990; Lifshitz, 1990; Mikawa et al., 1992; Worth, 1990; Worth & Rodriguez, 1987). Latinas are supposed to be virgins until marriage, naive about sex, submissive to their partner's sexual desires, and mothers in the context of marriage. In comparison, Latino men are supposed to be sexually promiscuous, knowledgeable about sex, sexually aggressive and procreating. Unfortunately, these sexual gender norms can potentially lead to unsafe sex among Latinas (e.g., Romero et al., 1997; Worth, 1990). To better understand how this may

occur, an examination of the existing literature on sexual gender norms and risky sexual behaviors is detailed below.

Sexual Behavior

Although researchers have yet to examine the influence of sexual gender norms on sexual practices among Latinas, there are speculations regarding how sexual gender norms place Latinas at sexual risk for HIV. With regard to Latinas with traditional sexual gender norms, the literature proposes that gender role constraints are placed on Latinas' sexual behaviors (Flaskerud et al., 1996; Flores-Ortiz, 1994; Gomez & Marin, 1996; Marin, 1990; Mays & Cochran, 1988; Moore et al., 1995; Worth & Rodriguez, 1987). For example, traditional Latinas may feel it is inappropriate sexual conduct for a woman to have multiple sexual partners, to engage in anal sex, and to ask her male partner to use a condom because she is supposed to be inexperienced and naive about sex. Second, in traditional Latino culture it is the male's responsibility to initiate sexual decision making, not a woman's (Gomez & Marin, 1996; Worth & Rodriguez, 1987). Thus, within this traditional perspective of sexuality, sexually active Latinas who attempt to negotiate the use of a condom or have more than one sexual partner run the risk of being labeled promiscuous, dominant, or aggressive by their sexual partner (Flores-Ortiz, 1994; Mays & Cochran, 1988; Weeks et al, 1995; Worth & Rodriguez, 1987). Clearly, a Latina's beliefs about appropriate sexual gender norms for women and men will influence whether or not condoms are used in her sexual relationship.

Another component of sexual gender norms that may lead to unsafe sex is a Latina's belief not only about the appropriateness of requesting the use of a condom, but

her capacity to ask her partner to use one (i.e., condom self-efficacy). Specifically, condom self-efficacy refers to an individual's perceived ability to ask a sexual partner to use a condom (Gomez & Marin, 1996; Marin, Tschann, Gomez & Gregorich, 1998; Weinstock et al., 1993). This includes being able to ask that a condom be used in various situations (e.g., under the influence of alcohol, when in love with a partner) and with different partners (i.e., a steady partner or new partner). Studies demonstrate that Latinas, who do not feel capable of asking their sexual partner to use a condom, are less likely to be in sexual relationships where condoms are used (Gomez & Marin, 1996; Marin, Tschann, Gomez & Gregorich, 1998; Weinstock et al., 1993). For example, Gomez and Marin (1996) found that Latinas, who perceived themselves as ineffectual in requesting that a condom be used, were less likely to practice safer sex. Concurrent results emerged for Weinstock et al. (1993) and Marin et al (1998). These research findings indicate that Latinas, who experience less condom self-efficacy, may be at risk for the heterosexual transmission of the AIDS virus due to the infrequent use of condoms. Thus, when examining Latinas' sexual gender norms, it is critical not only to look at what Latinas perceive as appropriate for men and women, but also whether they feel able to initiate condom use.

It is important to note, however, that sexual gender norm restrictions may not be experienced by all Latinas (Espin, 1995; Maldonado, 1990). The literature proposes that as Latinas become more acculturated to mainstream society, they are more likely to adopt liberal sexual gender norms (e.g., Gomez & Marin, 1996; Marin & Flores, 1994; Romero et al., 1997). This, in turn, leads to more sexual freedom and experience, which

is likely to lead to condoms being used in a Latina's sexual relationship (Marin & Flores, 1994; Nyamathi et al., 1993; Sabogal et al., 1995). However, the sexual freedom obtained from following non-traditional sexual gender norms may place these Latinas at possible risk for HIV due to their engaging in additional high risk sexual behaviors such as anal sex and multiple sex partners (Ford & Norris, 1993a; Marin & Flores, 1994; Marin, Gomez et al., 1993; Marin, Tschann et al., 1993; Nyamathi et al., 1993; Sabogal et al., 1995).

While there is a paucity of empirical data available on how sexual gender norms affect risky sexual practices among Latinas, studies do indicate that there is a relationship between gender role attitudes and sexual behaviors (Jadack, Shibley Hyde, & Keller, 1995; Radlove, 1983; Smith, Resick, & Kilpatrick, 1980; Whitley, 1988). For example, Smith et al. (1980) found that college women with liberal sex role attitudes were more likely to be sexually experienced than women with traditional attitudes. Jadack et al. (1995) also found that college women who identified with liberal gender roles were more likely to engage in sex than women with traditional gender roles. Similar results emerged for Whitley (1988). In addition, Troiden and Jendrek (1987) found that women with more liberal sexual views were more likely to have engaged in different sexual activities. Furthermore, Radlove (1983) found that women who endorsed traditional gender roles were less likely to initiate sexual activities with their sexual partner. The findings from these studies provide some empirical support for the conjectures made by researchers about Latinas' sexual gender norms and risky sexual behaviors. Latinas who identify with traditional gender roles may feel confined by their

sexual gender role, which may result in condoms not being used in their sexual relationships. Latinas with liberal sexual views and gender role beliefs are more likely to be sexually experienced, and may not experience the same sexual limitations as traditional Latinas. This suggests that they may be more inclined to sexually experiment, which may increase the likelihood that will engage in high risk sexual behaviors such as anal sex and/or multiple sexual partners.

Relationship between Acculturation Level and Sexual Gender Norms

While traditional sexual gender norms are salient characteristics of Latino culture (Gomez & Marin, 1996), not all Latinas endorse these beliefs. In fact, level of acculturation may contribute to the range of sexual gender norms among Latinas (Marin & Flores, 1994; Romero et al., 1997). For example, Tharpe et al. (1968) found that less acculturated Mexican-American wives were more likely to follow traditional marital roles than highly acculturated Mexican-American wives. Kranau et al. (1982) found that less acculturated Mexican-American women were more likely to have conservative attitudes about women, and were more likely to participate in traditional gender roles in the home than highly acculturated Mexican-American women. Further, Canino's (1982) work with Puerto Rican women indicates that island born Puerto Ricans (a proxy for low acculturation) were more likely to have conservative sex roles than Puerto Ricans' born in the United States. Torres-Matrullo (1980) also found similar results. These findings indicate that less acculturated Latinas are apt to have traditional attitudes about women, and are likely to engage in traditional gender role behaviors. This suggests that as Mexican and Mexican American women become acculturated to American culture, they

are less likely to have traditional gender roles, which potentially translate to liberal sexual gender norms.

Summary of Sexual Gender Norms

In summary, the literature suggests that a Latina's sexual gender norms may place her at sexual risk for HIV in several ways. For less acculturated Latinas that are likely to adhere to traditional sexual gender norms, the risk for HIV may come from the difficulty of negotiating the use of a condom with their sexual partner. For more acculturated Latinas with liberal sexual gender norms, the risk for HIV may emerge from engaging in additional high risk sexual behaviors such as anal sex and multiple sex partners. Further research on sexual gender norms is necessary in providing additional insight into how acculturation level influences different HIV risk behaviors. This may be a critical piece of information that may help reduce the heterosexual transmission of the AIDS virus among Latinas. For example, if less acculturated Latinas are following traditional sexual gender norms, prevention messages for this group may be better directed toward their male sexual partners, who are likely to be responsible for sexual decision making. Given that the literature on sexual gender norms and HIV risk has primarily been speculative, empirical examination of this relationship is essential in discerning the sexual risk factors for this population (Amaro, 1991).

Moderating Variables

The current literature on Latinas and HIV/AIDS has just begun to identify the factors that impact Latinas' risky sexual practices. While the literature suggests there is a link between a Latina's sexual gender norms and HIV sexual risk behaviors (e.g.,

Gomez & Marin, 1996; Worth & Rodriguez, 1987), there are two critical factors that may impact this relationship: a partner's sexual gender norms and the use of alcohol. First, the literature proposes that Latinas with liberal sexual gender norms are less likely to be in sexual relationships where condoms are used when they have partners with traditional sexual gender norms (Gomez & Marin, 1996). In fact, this interaction may explain why the overall use of condoms is low among Latinas, regardless of their acculturation level. Second, the literature speculates that Latinas experiencing gender norms incongruity, and who typically observe traditional sexual gender norms, may not do so when under the influence of alcohol. This, in turn, may result in their engaging in risky sexual behaviors such as anal sex or multiple sexual partners, behaviors that they might not have engaged in otherwise (Flores-Ortiz, 1994). Given that a significant number of Latinas with AIDS were infected through sexual contact, and that little is known about how these factors influence HIV sexual risk behaviors, further investigation of these potential interactions is critical in understanding what contributes to the sexual transmission of HIV among Latinas.

Partner's Sexual Gender Norms

The influence of a Latina's partner on the use of condoms in their relationships is a new area of research in the HIV/AIDS literature. To date, few studies have examined the potential role this factor may have on the use of condoms by Latinas and their partners (Gomez & Marin, 1996; Moore et al., 1995).⁴ For example, Gomez and Marin

⁴ The literature on Latinas and HIV/AIDS does not suggest that a partner's sexual gender norms will moderate the relationship between a woman's sexual gender norms and anal sex or between a woman's sexual gender norms and multiple sexual partners.

(1996) found that the use of condoms was infrequent among Latinas and their partners when Latinas believed their partner would react negatively if they were to ask their partner to use a condom. Similarly, Moore et al.'s (1995) results indicated that when a Latina believed her partner would respond negatively, she was less likely to request that her partner use a condom. A Latina's belief that her partner would react negatively might emerge from her perception that her partner adheres to traditional sexual gender norms and may not think it appropriate for a woman to be asking a man to use a condom. Some focus group data supports this supposition. For example, focus groups conducted by O'Donnell, San Doval, Vornfett and DeJong (1994) indicated that many Latinas were afraid that their partner would think they were "unclean" or "bad" women if they requested the use of a condom. These findings are particularly interesting, given that the majority of these participants were bilingual or English only speakers. This suggests that they were probably more acculturated Latinas and therefore, likely to have liberal sexual gender norms; yet these findings indicate that their willingness to pursue the use of a condom may be hampered due to concerns about what their sexual partner thinks.

Additional support for these findings emerges from focus groups conducted by Flores-Ortiz (1994). She found that Chicana college students were interested in asking their partner to use condoms, but worried about asking their partner because it might "be misunderstood as indicating they had 'a past' or distrusted the male" (Flores-Ortiz, 1994, p.1166). This suggests that some Latinas may have the desire to introduce condoms into their sexual relationships, but may not do so if they believe their partner has traditional beliefs about what is sexually appropriate for a woman (Flores-Ortiz, 1994; Gomez &

Marin, 1996; Mays & Cochran, 1988; O'Donnell, San Doval, Vornfett & DeJong, 1994; Worth, 1990; Worth & Rodriguez, 1987).

Forrest, Austin, Vales, Fuentes and Wilson (1993) provide further support for this premise with focus groups conducted with primarily foreign-born Latino men. When focus group participants discussed their perception of women, many men expressed traditional views of women and made negative comments about women that tried to negotiate the use of a condom. Many felt that it was indicative of a woman's sexual promiscuity and the likelihood that she had a sexual disease. Moreover, many of the men in this sample infrequently used condoms. Interestingly, one man indicated that he would consent to use a condom prior to intercourse, but once engaged in sexual intercourse would decline from actually putting on a condom. This suggests that a woman's desire to have her partner use a condom may be dismissed or circumvented when her partner has traditional sexual gender norms.

In summary, these findings indicate that while a woman with liberal sexual gender norms might be expected to be in a sexual relationship where condoms are used, this may not be the case if her partner has traditional sexual gender norms. This moderating effect may occur because Latinas feel uncomfortable negotiating the use of a condom with a partner that endorses traditional sexual gender roles. Alternatively, she may feel comfortable asking her partner to use a condom, but her partner may disregard her request to use a condom which places her at risk for HIV. Furthermore, although the literature does not address the possible scenario of a woman having traditional sexual gender norms and her partner having liberal sexual gender norms, one might argue that

his beliefs may moderate the relationship between her sexual gender norms and the use of condoms. However, in this case it would result in condoms being used in the sexual relationship. Considering that the primary method of prevention for HIV among sexually active individuals is the use of a male condom, and that for women it requires the cooperation of their male partner (Amaro, 1995), a greater understanding of what factors prevent or promote their use is vital in reducing the prevalence of AIDS in the Latino community.

Use of Alcohol

The use of alcohol before sexual intercourse may be another factor that moderates the relationship between a Latina's sexual gender norms and risky sexual behaviors. This moderating relationship is based on the premise that Latinas trying to maintain aspects of both Latino and American culture, may experience conflict regarding sexual gender norms (i.e., gender norm incongruency) (de Anda, 1984; Pavich, 1986), and may drink before sex to address this normative struggle (Flores-Ortiz, 1994). Further, given that cultural sexual gender norms are difficult to modify (Gomez & Marin, 1996), it is likely that Latinas experiencing gender norm incongruency actually follow traditional sexual gender norms, but when under the influence of alcohol may engage in unconventional risky sexual behaviors (Marin & Flores, 1994; Flores-Ortiz, 1994). For example, Latinas that typically would not engage in anal sex because of adherence to traditional sexual gender norms may do so when alcohol is used before sexual intercourse. Further investigation of the role of alcohol as a moderator is essential because it may be a critical point of intervention.

Gender Norm Incongruity. Focus group discussions led by Flores-Ortiz (1994) provide some clarity regarding the potential moderating effect of alcohol use. Chicanas in her focus groups commented that cultural gender norms created “an impossible context for women” that were trying to live in both worlds (i.e., in Latino and mainstream society) (p.1160). Many stated that they experienced feelings of conflict as to which cultural gender norms to follow, particularly norms governing “appropriate” sexual conduct (i.e., gender norm incongruity). In fact, some Chicanas shared that they used alcohol before sex to alleviate their feelings of gender norm incongruity.

Further, many of these same women acknowledged that when under the influence of alcohol, they were more likely to participate in sexual behaviors, they would not have engaged in otherwise. For example, some participants stated they probably would have remained virgins (i.e., a traditional sexual gender norm), but the use of alcohol made them uninhibited, and provided them with the freedom to engage in premarital sex. This suggests that when alcohol is used by Latinas experiencing gender norm incongruity, although they may customarily follow traditional sexual gender norms, the use of alcohol may result in their engaging in atypical risky sexual behaviors. That is, they may be more likely to participate in anal sex and/or multiple sexual, which can place them at sexual risk for HIV. In summary, different risky sexual behaviors may emerge when alcohol is used prior to sexual intercourse.

While research indicates that the use of alcohol prior to sex contributes to risky sexual behaviors (e.g., Bagnal, Plant & Warwick, 1990; Hingson, Strunin, Berlin, & Heeren, 1990; Kraft, Rise & Traen, 1990; Leigh, 1990; Stall, Heurtin-Roberts,

McKusick, Hoff, & Lang, 1990), little is known about the moderating effect of alcohol use between a Latina's sexual gender norms and HIV sexual risk behaviors. Considering the use of illicit drugs is low among Mexican and Mexican-American women (Amaro, Whitaker, Coffman, & Heeren, 1990; De La Rosa, Khalsa & Rouse, 1990; Rebach, 1992), and the literature on the use of alcohol and risky sexual behaviors has been criticized for confounding the use of alcohol with drugs (Bolton, Vincke, Mak & Dennehy, 1992), this study focused solely on the use of alcohol.

Research Questions and Hypotheses

Acculturation and HIV Sexual Risk Behaviors

In summary, the research on Latinas and HIV/AIDS provides evidence that distinct sexual risk behaviors exist for different levels of acculturation. For example, research reveals that as a Latina's level of acculturation decreases, so does the likelihood that she will be in a sexual relationship where condoms are used (e.g., Marin & Flores, 1994). However, the literature also suggests that while highly acculturated Latinas and their sexual partners are more likely to use condoms, the general use of condoms is low among all Latinas (e.g., Catania et al., 1994). Furthermore, the literature demonstrates that as a Latina's level of acculturation increases, so does the likelihood that she will engage in other HIV sexual risk behaviors such as multiple sexual partners and/or anal sex (e.g., Sabogal et al., 1995), placing them at risk for contracting HIV. Given these findings, the proposed study will address the following research question and hypotheses:

Research Question #1

1. To what extent does acculturation level lead to different HIV sexual risk behaviors?

Hypotheses.

- 1a. As a woman's level of acculturation decreases, she is less likely to use condoms during vaginal intercourse.
- 1b. As a woman's level of acculturation increases, she is more likely to engage in anal intercourse.
- 1c. As a woman's level of acculturation increases, she is more likely to have multiple sexual partners.

How Acculturation Level Impacts Sexual Risk Behaviors

In order to better understand how acculturation level contributes to these different HIV sexual risk behaviors among Mexican and Mexican-American women, a general theoretical model of predictors was developed for the proposed study. This model predicts that religion and a woman's sexual gender norms will mediate the relationship between acculturation level and HIV sexual risk behaviors (see Appendix A - Figure 1). In addition, this model proposes that women who experience gender norm incongruency will be more likely to use alcohol before sex. Moreover, this model postulates that the sexual gender norms of a Latina's partner and the use of alcohol prior to intercourse will moderate the relationship between a Latina's sexual gender norms and HIV sexual risk behaviors.

The premise of the proposed study was that a woman's level of acculturation would lead to different beliefs and experiences (i.e., religion, her sexual gender norms,

gender norm incongruency, her partner's sexual gender norms and/or the use of alcohol) which, in turn, will influence different HIV sexual risk behaviors. For example, less acculturated Mexican and Mexican-American women are more likely to be highly religious and have traditional sexual gender norms which are potential obstacles in the use of condoms for this group of women. Furthermore, the use of alcohol prior to intercourse may be a factor that contributes to unsafe sex practices with Latinas experiencing gender norm incongruency. Among more acculturated women, being less religious and following non-traditional sexual gender norms may increase the likelihood that this group of women will engage in other sexual risk behaviors such as multiple partners and/or anal sex. While more acculturated Latinas are more inclined to use a condom (i.e., due to liberal sexual gender norms), having a sexual partner with traditional sexual gender norms may decrease the likelihood that these women will be able to persuade their partner to use a condom. Given that the influence of Mexican culture is contingent upon a woman's level of acculturation, a greater understanding of how acculturation level contributes to sexual risk behaviors is necessary to reduce the high prevalence of HIV among this population. Therefore, the second research question of the proposed study is:

Research Questions #2

2. How does acculturation level lead to different HIV sexual risk behaviors?

Hypotheses

2a. As a woman's level of acculturation increases, she is less likely to be religious.

- 2b. As a woman's level of acculturation increases, she is less likely to be fate oriented.
- 2c. As a woman's level of acculturation increases, she is less likely to have traditional sexual gender norms.
- 2d. The more a woman experiences gender norm incongruency, the more likely she is to drink before sex.
- 2e. As a woman's level of religiosity increases, she is less likely to be in a relationship where condoms are used for vaginal intercourse.
- 2f. As a woman's level of fate orientation increases, she is less likely to be in a relationship where condoms are used.
- 2g. As a woman's level of religiosity increases, she is less likely to engage in anal sex with her sexual partner.
- 2h. As a woman's level of religiosity increases, she is less likely to have multiple sexual partners.
- 2i. As a woman's sexual gender norms become more liberal, she is more likely to be in a relationship where condoms are used for vaginal intercourse.
- 2j. As a woman's sexual gender norms become more liberal, she is more likely to engage in anal sex with her sexual partner.
- 2k. As a woman's sexual gender norms become more liberal, she is more likely to have multiple sexual partners.

- 2l. Religiosity will mediate the relationship between acculturation level and the use of condoms for vaginal intercourse.
- 2m. Fate orientation will mediate the relationship between acculturation level and the use of condoms for vaginal intercourse.
- 2n. Religiosity will mediate the relationship between acculturation level and anal sex.
- 2o. Religiosity will mediate the relationship between acculturation level and multiple sexual partners.
- 2p. Sexual gender norms will mediate the relationship between acculturation level and the use of condoms for vaginal intercourse.
- 2q. Sexual gender norms will mediate the relationship between acculturation level and anal sex.
- 2r. Sexual gender norms will mediate the relationship between acculturation level and multiple sexual partners.
- 2s. A partner's traditional sexual gender norms will moderate the relationship between a woman's liberal sexual gender norms and the use of condoms during vaginal intercourse. That is, women with liberal sexual gender norms are less likely to be in sexual relationships where condoms are used, when their partner has traditional sexual gender norms.
- 2t. The use of alcohol will moderate the relationship between a woman's traditional sexual gender norms and anal intercourse. That is, women with traditional sexual gender norms are more likely to engage in anal sex,

when alcohol is used prior to sexual intercourse.

- 2u. The use of alcohol will moderate the relationship between a woman's traditional sexual gender norms and multiple sexual partners. That is, women with traditional sexual gender norms are more likely to have multiple sexual partners, when alcohol is used prior to sexual intercourse.

Contributions of the Proposed Study

In conclusion, the contributions of this study are twofold. First, this study provides a conceptual model of how Mexican culture affects both sexual risk behaviors, and a woman's ability to take precautionary steps to reduce her risk of becoming infected with HIV. Given that the current understanding of sexual risk practices has primarily focused on individual behavior (Amaro, 1995; Mann, 1991), this study is significant because it provides a broader framework for understanding sexual decision making. It furthers our comprehension of how cultural beliefs influence sexual behavior, and how they may impose barriers for women of Mexican descent who attempt to negotiate safer sex with their sexual partner, and why they may be likely to engage in other sexually risky behaviors. Considering that the prevailing theories (e.g., health belief model, theory of reasoned action, social learning theory), which have guided current HIV/AIDS prevention efforts, have had limited success with Latinas (Amaro, 1995), this theoretical model may provide the insight necessary to create effective prevention strategies for this population.

The second contribution of this study lies in its ability to inform prevention efforts for Latinas. In fact, this type of study is a critical first step in creating culturally

appropriate HIV/AIDS interventions (Amaro, 1991; Marin, 1993). The proposed study will inform the development process in several ways. First, by examining how acculturation level impacts sexual practices, one can begin to discern which cultural values contribute to the diverse sexual practices of Mexican and Mexican American women. This information may assist in tailoring interventions to meet the specific needs of particular acculturation groups. For example, prevention efforts directed toward less acculturated Latinas may have to consider the strong influence culture has on this group's sexual behavior, and may have to design strategies that incorporate these values (e.g., Gomez & Marin, 1996). In addition, given that the primary method of protection against HIV is the use of a male condom, a better understanding of the factors that influence a woman's ability to negotiate the use of a condom is imperative, if the heterosexual transmission of the AIDS virus is to be reduced (e.g., Amaro, 1995). The identification of culturally based safer sex barriers may help Latinas to develop the skills needed to protect themselves from the AIDS virus. It may also encourage the development of prevention efforts aimed at heterosexual and bisexual men since their cooperation is needed for safer sex to be practiced. Finally, this study may clarify how the use of alcohol may contribute to HIV risk behaviors among Mexican and Mexican American women. This information could help inform the design of interventions for women experiencing gender norm incongruity. By obtaining a better understanding of how culture impacts sexual beliefs and behaviors, practioners can create interventions that are culturally competent and appropriate.

Methods

Participants

Considering that few studies have focused exclusively on single Latinas (Flores-Ortiz, 1994; Marin, Tschann, et al., 1993; Marin et al., 1998), and that dating relationships may contribute to risky sexual practices among heterosexual couples (Flores-Ortiz, 1994; Wyatt et al., 1997), only unmarried women of Mexican descent were targeted for this study. Interviews were conducted in California with a convenience sample of 111 Mexican and Mexican-American women. For the current study, women who had not engaged in vaginal and/or anal intercourse in the last year did not meet the study's requirements, and were subsequently excluded from these analyses (n=21).

Demographic Information

Several demographic characteristics differentiate the present sample from other research samples that have focused on Latinas and HIV/AIDS. First, the present sample was exclusively Mexican and Mexican-American women; previous research in the field has not been population specific, and has included other Latino subgroups (e.g., Central Americans, Puerto Ricans) in their samples (Deren et al., 1996; Flaskerud et al., 1996; Ford, Rubenstein, & Norris, 1994; Gomez & Marin, 1996). Second, the present study consisted of only single women. Prior studies did not differentiate between married and single women, and combined them as one sample (Gomez & Marin, 1996; Flaskerud et al., 1996). Third, the majority of women in the current study were young adults (mean age = 24.39, SD = 2.71), whereas in other studies, samples consisted of either

adolescents (Flores-Ortiz, 1994; Ford et al., 1994) or adults with a mean age in the early thirties (Gomez & Marin, 1996; Marin & Flores, 1994; Marin, Tschann, et al., 1993). Consequently, a benefit of the current study is an opportunity to investigate the predictors of HIV sexual risk behaviors with a population that has not been closely examined.

Table 1 contains demographic information pertaining to the 90 women in this study. While the majority of participants have never been married (96%), four women identified themselves as divorced. In addition, 77% of the participants stated that they were involved in a steady relationship when interviewed. The length of these relationships ranged from 1 month to nine years, with a mean of 3.07 years ($SD=2.37$). Women ranged in age from 21-30, with a mean age of 24.39 ($SD = 2.71$). The majority of participants (72%) were born in the United States, with 28% of the sample being born in Mexico. In regard to employment, 44% of the women worked full-time, 36% worked part-time, 10% were unemployed, 7% were keeping house and one woman was a seasonal employee. The mean for years of education was 13.70 ($SD=2.76$), and 52% of the sample were attending school at the time of the interview (i.e., undergraduate courses, ESL classes). Household income levels ranged from \$400 to \$10,666 a month, with a mean of \$1,934.58 per month ($SD=1597.03$). The majority of women were Catholic (82%), with the remaining participants either being Protestants (13%), agnostics (1%), or having no religious affiliation (4%).

Sexual Risk History

Additional information was acquired from participants to assess their risk for HIV/AIDS (see Table 2). In regard to their use of birth control, 49% of the women interviewed had partners that used condoms, 46% used birth control pills, 20% of the women were not using any form of birth control when interviewed, 12% used the withdrawal method, 7% used Depro Provera, 4% used the rhythm method, 2% of the women were sterilized, 2% used spermicide, one woman used an IUD, and another woman had a male partner that was sterilized. Twenty-nine percent of the women interviewed (n=26) used more than one form of birth control. Of these women, 92% used two forms of birth control (e.g., birth control pills and condoms), and 8% used three forms of birth control (e.g., birth control pills, condoms and spermicide). Forty-three percent of the women had experienced at least one pregnancy. (Data were not collected as to how many of these pregnancies had resulted in births, miscarriages, or abortions.) Two thirds of the sample had been tested for the AIDS virus (63%) and STDs (67%). None of the women were HIV positive, and of those who had been tested for STDs, 17% indicated that they were infected at some point with an STD. Only one woman indicated she had a blood transfusion between 1977 and 1985. None of the women interviewed had used intravenous drugs.

Table 1

Demographic Information

Characteristics	N	%
Marital status		
Never been married	86	96
Divorced	4	4
Current relationship status		
Not involved in a steady relationship	21	23
Involved in a steady relationship	69	77
Length of relationship		
0 thru 2 years	30	33
over 2 years thru 4 years	14	16
over 4 years thru 6 years	16	18
over 6 years thru 8 years	8	9
over 8 years thru 10 years	1	1
Age		
21	15	17
22	13	14
23	14	16
24	9	10
25	8	9
26	7	8
27	11	12
28	5	6
29	3	3
30	5	6
Place of birth		
United States	65	72
Mexico	25	28
Employment status		
Working full-time	40	44
Working part-time	32	36
Unemployed	9	10
Keeping house	6	7
Other - Seasonal employee	1	1

Table 1 (cont'd)

Characteristics	N	%
Years of education		
0 - 6 years	3	3
7 - 12 years	22	24
13 - 16 years	58	64
17 - above	7	8
Student status		
No	43	48
Yes	47	52
Monthly income		
\$400 - \$999	27	30
\$1000 - \$1,999	26	29
\$2,000 - \$2,999	19	21
\$3,000 - \$3,999	11	12
\$4,000 - \$4,999	2	2
\$5,000 - \$5,999	2	2
\$6,000 - \$6,999	2	2
\$10,000 - \$10,999	1	1
Religion		
Apostolic	1	1
Agnostic	1	1
Baptist	1	1
Catholic	74	82
Christian (Non-denominational)	5	6
Church of Christ	1	1
Jehovah Witness	1	1
Mormon	1	1
7th Day Adventist	1	1
No religious affiliation	4	4

Table 2

Participant Sexual Risk History

Characteristics	N	%
Current type of contraception		
Birth control pills	41	46
Condoms	44	49
Depro Provera	6	7
Female sterilization	2	2
IUD	1	1
Male sterilization	1	1
Spermicide/ cremes/ jellies	2	2
Rhythm method	4	4
Withdrawal method	11	12
No method	18	20
Pregnancy		
No	51	57
Yes	39	43
HIV testing		
No	33	37
Yes	57	63
HIV test results (n=57)		
Negative	57	100
Positive	0	0
STD testing		
No	30	33
Yes	60	67
STD results (n=60)		
Negative	50	83
Positive	10	17
Blood transfusion*		
No	88	99
Yes	1	1
Injected drugs		
No	90	100
Yes	0	0

Partner Sexual Risk History

In addition to their own sexual risk history, participants were asked to share their knowledge of their male partner's sexual background (see Table 3). Four percent of the women interviewed indicated that their partner was sexually involved with another woman, and another 8% were not sure. Of the women who knew their partner had sex with other women, two stated that their partner did not use a condom with these other women, and two did not know whether or not condoms were used in these other sexual relationships. Compared to other studies on Latinas, the number of male partners with multiple sexual partners in this sample is low; other studies have documented that between 30 and 40% of their sample report having male partners who were sexually involved with another woman (Deren, Shedlin, & Beardsley, 1996; Flaskerud et al., 1996).

Fifty-nine percent of participants had partners who were tested for HIV, 29% had partners that had not been tested, and 12% of participants did not know if their partner had or had not been tested. Of those who had been tested, 98% were HIV negative and 2% of participants were unaware of their partner's HIV status. Forty-three percent of the women were involved with men who had been tested for STDs, and 5% of these men had been infected at some point with an STD. Two percent of the women had partners who had received a blood transfusion between 1977 and 1985, and 13% did not know if their partner had received a blood transfusion during this time frame. In regard to their partner's IV drug history, two participants commented that their partner had injected drugs with a needle that were not prescribed by a doctor, and six participants did not

Table 3

Partner Sexual Risk History (n=99)

Characteristics	N	%
Multiple sexual partners		
No	87	88
Yes	4	4
Does not know	8	8
Use of condoms with other partners		
No	2	50
Yes	0	0
Does not know	2	50
HIV testing		
No	29	29
Yes	58	59
Does not know	12	12
HIV test results		
Negative	57	98
Positive	0	0
Does not know	1	2
STD testing		
No	33	33
Yes	43	43
Does not know	23	23
STD results		
Negative	40	93
Positive	2	5
Does not know	1	2
Blood transfusion		
No	84	85
Yes	2	2
Does not know	13	13
Injected drugs		
No	91	92
Yes	2	2
Does not know	6	6

Table 3 (cont'd)

Characteristics	N	%
Sex with other men		
No	96	97
Yes	0	0
Does not know	3	3
Jail		
No	58	59
Yes	35	35
Does not know	6	6

know about their partner's IV drug use. Ninety-seven percent of the sample stated that their sexual partner was not sexually involved with men, and 3% said that they did not know. A third of the women interviewed (39%) had sexual partners who had been in jail at one point in time, and 6% of the women did not know about their partner's jail history. (No data were collected as to the length of time in jail or reason for imprisonment).

Overall, the sample (n=90) for this study was reasonable and fairly representative of the Mexican and Mexican-American women in southern California. Further, all variables under investigation were normally distributed.

Procedure

Participants were recruited from schools (i.e., ESL classes, undergraduate courses), social groups, churches and community agencies in California. Staff, counselors, pastors and group leaders at each site identified and recruited women who were potentially eligible for the study. Leaders were asked to use the following criteria to identify potential participants: (1) must be an unmarried woman of Mexican descent,

(2) must be between the ages of 21 and 30, and (3) must be involved in a heterosexual relationship. In addition, the primary investigator for this study made several presentations at churches, undergraduate courses and social groups to recruit potential participants. Furthermore, participants were recruited through flyers distributed and posted at churches, colleges, community agencies, laundromats, and stores that serviced a predominantly Latino population (see Appendix B & C). Lastly, a snow-ball technique was utilized to obtain respondents. Table 4 contains the percentage of women obtained for this study using the various recruiting techniques.

Table 4

Percentage of Participants Obtained by Recruiting Strategy

Recruiting Strategy	N	%
Snowball	40	44
Referral by agency staff /leader of social organization	23	26
Class presentation by researcher	14	16
Posted or distributed flyer	8	9
Church presentation by researcher	5	6

Once potential participants were identified, they were referred to the primary researcher who then contacted them by phone to arrange for an interview date and time. For those women responding to the distributed or posted flyer, they initiated the phone contact with the primary researcher by using the 800 telephone number provided on the flyer. During the initial phone contact, potential participants were informed about the study, and asked if they were interested in participating (see Appendix D & E). If they

consented, respondents were asked to verify their ethnic background, age, marital status, and whether they were involved in a romantic heterosexual relationship, or in a sexual relationship with a man. If the respondent did not qualify for the study, the researcher informed the respondent why she was not eligible for the study, and the respondent was thanked for her interest. Of the 144 women that called, ten did not qualify for the study because they did not meet one or several of the criteria for participation.

If a respondent met the criteria for the study ($n=133$), she was questioned further to determine her level of acculturation. This was done to assure variability in level of acculturation. Participants were given a shortened acculturation scale developed for phone interviews (Marin et al., 1987) (see Appendix D & E). An English and Spanish version of the measure was developed by Marin and his associates. The measure consisted of five questions about the use of language: (1) In general, what language do you read and speak?, (2) What was the language(s) you used as a child? (3) What language do you usually speak at home?, (4) In which language do you usually think?, and (5) In which language do you usually speak with your friends? The scale was scored on a 5-point Likert type scale ranging from (1) only Spanish to (5) only English, and an average of the five responses resulted in an acculturation score. Table 5 contains the psychometric properties and internal consistencies of this acculturation scale ($\alpha = .92$). Using Marin's cutoff scores, a score of 1 thru 2.33 was categorized as someone low in acculturation, a score of 2.34 thru 3.66 as moderately acculturated, and a score of 3.67 thru 5 as highly acculturated. Table 6 contains the percentage of women that were identified as low, moderately or highly acculturated through this initial screening

process.

Although 133 women qualified and consented to be interviewed, sixteen women either canceled with no desire to reschedule or were no shows for the appointed interview time, and did not return calls when attempts were made to reschedule. In addition, the research team was unable to contact seven women that had originally consented to participate in the study. Furthermore, of the 111 women interviewed, 23 interviews were excluded from analysis because respondents had not participated in vaginal or anal sex in the last year of being interviewed.

Face to face structured interviews were conducted by the researcher and four research assistants that were trained and supervised by the primary researcher. All research assistants were bilingual, Mexican or Mexican-American women. Two of the research assistants were college graduates with previous interviewing experience, and the remaining research assistants were senior level undergraduates obtaining degrees in psychology. Training for this study consisted of a three hour meeting in which assistants reviewed a training manual with the researcher (see Appendix F), obtained interview supplies (e.g., interview protocol, consent forms), and participated in two mock interviews. These interviews were recorded and the audio tapes were reviewed by the primary researcher. Interviews were reviewed for the accuracy of coding and interviewing technique. Any necessary feedback was given to the research assistants after listening to the audio tapes. Research assistants did not conduct interviews until after the primary researcher reviewed the audio taped mock interviews.

Table 5

Psychometric Properties of Short Phone Acculturation Scale

Scale Items	Item Means	Item SD	Corrected Item-Total Correlations
1. In general, what language do you read and speak?	3.46	1.05	.84
2. What was the language(s) you used as a child?	2.58	1.54	.78
3. What language do you usually speak at home?	2.98	1.41	.80
4. In which language do you usually think?	3.52	1.25	.79
5. What language do you usually speak with your friends?	3.60	1.17	.79
Alpha = .92 Scale Mean = 16.33 Scale SD = 5.62			

Table 6

Acculturation Categories Determined by Phone Acculturation Measure

Level of Acculturation	N	%
Less acculturated	28	21
Moderately acculturated	59	44
Highly acculturated	46	35

The primary researcher maintained weekly contact with the research assistants either by phone, or by personal visits to their home, or school. During this weekly contact, the researcher would provide assistants with an updated list of participants they were to interview, followed-up with interviews already assigned, discussed the reliability of previous interviews conducted, answered questions, and resolved other issues with

regard to interviews, or to the coding of the responses.

Eighty-three percent of the interviews were conducted by the primary researcher, with the remaining interviews being conducted by research assistants (17%). All interviews conducted by the research assistants (n=15) were audio taped and the primary researcher reviewed each audio tape to verify the accuracy of participant's responses. Interviews ranged from 20 to 90 minutes and were conducted at a location convenient to the participant. Furthermore, participants chose to be interviewed either in English or Spanish. Participants were reimbursed \$15 for their time, and consent was obtained prior to the interview (see Appendix G & H).

Measurement

All measures were in English and Spanish. All items, except for the Short Acculturation Scale and the Acculturation Rating Scale for Mexican Americans - II (ARSMA-II) which have an English and Spanish version, were translated into Spanish, and back-translated into English by several bilingual, bicultural translators to assure proper translation and equivalency in meaning (Marin & Marin, 1991). Instruments were then modified for language clarity and cultural appropriateness. The interview instrument included questions on demographic characteristics, acculturation level, participant and partner's sexual gender norms, gender norms incongruency, religion, the use of alcohol, and HIV sexual risk behaviors.

Demographics

For descriptive purposes demographic information on marital status, education, employment, monthly income, age, place of birth, generational status, and participant

and partner sexual risk history (e.g., whether or not they had been tested for HIV/AIDS) were collected during the interview (see Appendix I & J).

Acculturation

Acculturation level was assessed using two measures (see Appendix K& L: Acculturation Measures). The first measure consisted of Scale 1 of the Acculturation Rating Scale for Mexican Americans-II (ARSMA-II) (Cuellar et al., 1995). The scale has four dimensions: (1) language usage and preference, (2) ethnic identity, (3) cultural heritage and ethnic behaviors, and (4) ethnic interaction. The items on this measure were scored on a 5-point Likert type scale ranging from (1) not at all to (5) extremely often/almost always. The measure has two subscales: (1) a Mexican orientation subscale (MOS) and (2) an Anglo orientation subscale (AOS).

The original AOS was comprised of 13 items. Two items with low item-total correlations were deleted: (1) I like to identify myself as an American ($r=.50$) and (2) I like to identify myself as an Anglo-American ($r=.30$). Sample items from the AOS include “I speak English” and “I associate with Anglos.” The AOS score was obtained by averaging across the remaining 11 items. The internal consistency of the subscale was acceptable (AOS Cronbach alpha = .91). The original MOS consisted of 17 items. Seven items with low item-total correlations were eliminated (see Table 8). Sample items from the MOS include “I speak Spanish” and “My family cooks Mexican foods.” The remaining 10 items were averaged to create an MOS score. An alpha coefficient of .91 was established for this subscale. A difference score between the AOS and the MOS was computed as the women’s linear acculturation score (i.e., ARSMA-II score). Low

acculturation scores represented individuals that were “Mexican oriented”, and high acculturation scores represented individuals that were “Anglo oriented.” Tables 7 and 8 contain the psychometric properties and internal consistencies of the AOS and MOS.

Table 7

Psychometric Properties of Anglo Oriented Subscale (AOS)

Scale Items	Item Means	Item SD	Corrected Item-Total Correlations
1. I speak English.	4.26	1.00	.85
2. I associate with Anglos.	3.09	1.31	.63
3. I enjoy listening to English language music.	4.14	1.01	.57
4. I enjoy English language TV.	4.06	1.14	.65
5. I enjoy English language movies.	4.51	.88	.60
6. I enjoy reading (e.g., books in English).	3.91	1.26	.71
7. I write (e.g., letters in English).	3.85	1.41	.77
8. My thinking is done in the English language.	3.98	1.33	.69
9. My contact with the USA has been...	4.60	.86	.59
10. My friends, while I was growing up, were of Anglo origin.	2.36	1.16	.57
11. My friends now are of Anglo origin.	2.56	1.05	.57
Alpha = .90	Scale Mean = 41.32	Scale SD = 9.02	

Table 8

Psychometric Properties of Mexican Oriented Subscale (MOS)

Scale Items	Item Means	Item SD	Corrected Item-Total Correlations
1. I speak Spanish.	3.66	1.17	.81
2. I enjoy speaking Spanish.	4.11	1.20	.73
3. I associate with Mexicans and/or Mexican Americans. *	4.43	.84	.20
4. I enjoy listening to Spanish language music.	4.21	1.19	.69
5. I enjoy Spanish language T.V.	3.29	1.35	.68
6. I enjoy Spanish language movies.	2.82	1.20	.53
7. I enjoy reading (e.g., books in Spanish).	2.67	1.37	.73
8. I write (e.g., letters in Spanish).	2.50	1.38	.73
9. My thinking is done in the Spanish language.	3.03	1.27	.74
10. My contact with Mexico has been...	3.19	1.19	.55
11. My father identifies or identified himself as "Mexicano." *	4.63	.85	.37
12. My mother identifies or identified herself as "Mexicana." *	4.39	1.25	.42
13. My friends, while I was growing up, were of Mexican origin. *	4.06	1.00	.40
14. My family cooks Mexican foods.	4.61	.71	.54
15. My friends now are of Mexican origin.*	4.15	.89	.47
16. I like to identify myself as a Mexican American.*	4.02	1.46	-.08
17. I like to identify myself as Mexican.*	4.08	1.14	.42
Remaining 10 items: Alpha = .91 Scale mean = 34.09 Scale SD = 9.02			

Note. * Item removed from subscale due to low corrected item-total correlations.

Given that acculturation is a global construct, and that the outcome variables for this study are time-specific (i.e., their last four sexual encounters), a second scale was constructed to measure acculturation as a time specific variable. A five-item scale was developed to measure a participant's level of acculturation in the last 30 days. The items for this scale were adapted from Marin et al.'s (1987) shortened acculturation scale. This measure was comprised of the following five questions: (1) In the last 30 days, what was the primary language(s) you spoke at home?, (2) In the last 30 days, what was the primary language spoken in the movies and T.V. programs you watched?, (3) In the last 30 days, what language were the radio programs you usually listened to?, (4) In the last 30 days, the people who have visited you or who you have visited were primarily?, and (5) In the last 30 days, the social gatherings/parties which you have attended have primarily been? The items were scored on a 5-point Likert type scale ranging from (1) only Spanish to (5) only English for the first three questions and (1) All Latinos/Hispanics to (5) All Americans for the last two questions. An average of the five responses resulted in a 30-day acculturation score, with higher scores meaning highly acculturated. An alpha coefficient of .79 was obtained for the current study. The psychometric properties and internal consistencies of this measure can be found in Table 9.

An overall linear acculturation score was obtained for participants by standardizing their ARSMA-II score and their 30-day acculturation score ($r = .96$, $p < .01$), and then averaging the two scores. A low score represented a woman who was less acculturated and a high score represented a woman who was highly acculturated.

Table 9

Psychometric Properties of 30-day Acculturation Scale

Scale Items		Item Means	Item SD	Corrected Item-Total Correlations
1.	In the last 30 days, what was the primary language(s) you spoke at home?	3.14	1.30	.60
2.	In the last 30 days, what was the primary language spoken in the movies and T.V. programs you watched?	3.89	1.05	.63
3.	In the last 30 days, what language were the radio programs you usually listened?	3.26	1.27	.60
4.	In the last 30 days, the people who have visited you or who you have visited were primarily:	1.98	.94	.55
5.	In the last 30 days, the social gatherings/ parties which you have attended have primarily been:	2.08	.96	.57
Alpha = .79		Scale Mean = 14.34		Scale SD = 4.17

Then, in order to compare differences between groups, this linear acculturation score was used to create acculturation categories. Marin et al.'s (1987) method for creating acculturation groups was utilized in this study. Three acculturation groups of low, moderate, and high were established by dividing the range of acculturation scores (range = 4.622) by three. This created the following cut off scores: -2.272 thru -.731 = less acculturated, -.730 thru .811 = moderately acculturated, and .812 thru 2.353 = highly acculturated (see Table 10 for frequencies). The acculturation group score was used for the ANCOVA and the mean linear acculturation score was used with the regression analyses.

Table 10

Acculturation Categories (n=90)

Level of Acculturation	N	%
Less acculturated	18	20
Moderately acculturated	56	63
Highly acculturated	16	18

Sexual Gender Norms

Sexual gender norms was measured using two scales (see Appendix M & N: Sexual Gender Norms Measures). The first scale was an 18-item scale constructed to measure a participant's attitudes and beliefs about sexual gender roles. Items were created by reviewing and extracting statements from the literature on Latino gender roles (e.g., Flaskerud et al., 1996; Flores-Ortiz, 1994; Marin, 1990; Marin, Gomez, Tschann, & Gregorich, 1996; Mays & Cochran, 1988; Moore et al., 1995; Pavich, 1986; Worth & Rodriguez, 1987). Participants were asked to identify the degree to which each item characterized their beliefs and attitudes about sexual gender roles by using a 6-point Likert scale of (1) strongly disagree to (6) strongly agree. In order for a high score to represent liberal (i.e., non-traditional) sexual gender norms 11 of the 18 items were recoded (see Table 11 for recoded items).

Given low corrected item-total correlations on this scale (see Table 11), a factor analysis using a varimax rotation was conducted to determine if the scale was unidimensional. Seven items did not load highly on any of the generated factors so they

Table 11

Psychometric Properties of Participant's Sexual Gender Norms Scale

Scale Items	Item Means	Item SD	Corrected Item-Total Correlations
1. Women should be virgins until they get married. (R)*	3.92	1.43	.31
2. A woman should ask her partner to use a condom.	5.46	.93	.27
3. A woman should know very little about sex until marriage. (R)	5.39	1.21	.25
4. It is acceptable if a woman does not want to have children.	4.83	1.34	.51
5. A "good" woman would not have anal sex. (R) *	3.96	1.56	.26
6. A man should determine whether or not birth control is used. (R)*	5.23	1.23	.38
7. A woman that carries condoms in her purse is "loose." (R)	5.03	1.23	.42
8. It is acceptable for a man to have many sexual partners.	2.06	1.46	.33
9. It is a woman's responsibility to buy condoms.*	2.58	1.55	.01
10. It is important for a woman to have children. (R)	3.39	1.56	.40
11. A man should determine how often a couple has sex. (R)	5.50	.88	.45
12. It is acceptable for a woman to have many sexual partners.	2.50	1.40	.41
13. Only "loose" women have oral sex. (R)	5.36	.87	.41
14. Birth control should not be used so that a woman can bear her partner many children. (R)	5.30	1.14	.38

Table 11 (cont'd)

Scale Items	Item Means	Item SD	Corrected Item-Total Correlations
15. A “good” man always uses a condom.*	4.19	1.34	-.01
16. It is appropriate for a man to ask his partner for anal sex.*	3.29	1.49	.08
17. A woman should comply with her partner’s wishes to have sex. (R) *	4.20	1.34	.22
18. It is disrespectful for a man to talk about sex with a woman. (R)	4.94	1.16	.28
Alpha = .70 Scale Mean = 77.44 Scale SD = 9.40			

Note. (R) = Item was reverse scored.

* = Item removed from measure due to low factor loadings.

were removed from the measure (see Table 11 for deleted items). A second factor analysis was conducted with the remaining items, and it yielded four factors. The first factor included 4 items (alpha = .69) regarding the participant’s perception of sexual gender roles (e.g., A man should determine how often a couple has sex; It is disrespectful for a man to talk about sex with a woman). The second factor included three items (alpha = .72) regarding the participant’s reproductive attitudes (e.g., It is important for a woman to have children; It is acceptable if a woman does not want to have children). The third factor included 2 items (alpha = .77) regarding the participant’s view of the double standard (i.e., It is acceptable for a woman to have many sexual partners; It is acceptable for a man to have many sexual partners). The fourth factor included two items (alpha = .63) regarding the participant’s beliefs about women’s sexual behavior and knowledge (i.e., A woman should ask her partner to use a condom; A woman should know very little about sex until marriage). Means for these four

subscales were computed, and were used to calculate an average sexual gender role score. Tables 12 to 15 contain the psychometric properties and internal consistencies of the four subscales.

Table 12

Psychometric Properties of Participant's Sexual Gender Roles Subscale

Scale Items	Item Means	Item SD	Corrected Item-Total Correlations
1. A woman that carries condoms in her purse is "loose." (R)	5.50	.88	.56
2. A man should determine how often a couple sex.	5.36	.87	.51
3. Only "loose" women have oral sex. (R)	4.94	1.16	.41
4. It is disrespectful for a man to talk about sex with a woman. (R)	5.03	1.23	.46
Alpha = .69 Scale Mean = 20.83 Scale SD = 3.01			

Note. (R) = Item was reverse scored.

Table 13

Psychometric Properties of Reproductive Attitudes Subscale

Scale Items	Item Means	Item SD	Corrected Item-Total Correlations
1. It is acceptable if a woman does not want to have children.	4.83	1.34	.67
2. It is important for a woman to have children. (R)	3.89	1.56	.52
3. Birth control should not be used so that woman can bear her partner many children. (R)	5.30	1.34	.48
Alpha = .72 Scale Mean = 13.52 Scale SD = 3.27			

Table 14

Psychometric Properties of Double Standard Subscale

Scale Items	Item Means	Item SD	Corrected Item-Total Correlations
1. It is acceptable for a man to have many sexual partners.	2.06	1.46	.63
2. It is acceptable for a woman to have many sexual partners.	2.50	1.40	.63
Alpha = .77	Scale Mean = 4.56	Scale SD = 2.58	

Table 15

Psychometric Properties of Women's Sexual Behavior and Knowledge Subscale

Scale Items	Item Means	Item SD	Corrected Item-Total Correlations
1. A woman should ask her partner to use a condom.	5.46	.93	.47
2. A woman should know very little about sex until marriage. (R)	5.39	1.21	.47
Alpha = .63	Scale Mean = 10.84	Scale SD = 1.84	

Note. (R) = Item was reverse scored.

The second scale used to measure sexual gender norms was a 10-item scale developed for this study to measure situation specific gender role behavior. Specifically, this measure assessed a participant's ability to negotiate the use of a condom (i.e., condom self-efficacy). Four of the items were obtained from the AIDS Related Self-efficacy Scale (Esteban, 1993), and the remaining six items were adapted from condom self-efficacy scales developed by Gomez and Marin (1996) and Marin, Gomez, Tschann,

et al. (1996). Utilizing a 5-point Likert type scale of (1) never to (5) always, participants were asked to indicate the extent to which each item described their ability to negotiate the use of a condom. Two items were reverse coded so that a low score represented low self-efficacy and a high score represented high self-efficacy: (1) It is difficult for me to ask my boyfriend to use a condom, and (2) If I were going on a date, and I thought that we might have sex, I would bring a condom with me.

To ascertain if the scale was unidimensional a factor analysis was conducted using varimax rotation. Three items did not load highly on any of the yielded factors so they were eliminated from the scale: (1) I feel comfortable asking a new partner to use a condom, (2) If someone I loved complained that he did not like to use a condom, I would be persuaded not to use one, and (3) Even if I had been drinking, I would ask my boyfriend to use a condom. A second factor analysis with the remaining items identified three factors. The first factor included 3 items ($\alpha = .74$) assessing the participant's ability to negotiate the use of a condom with a new partner (i.e., Even if I had been drinking, I would ask a new partner to use a condom; If I was about to have sex with someone, I would suggest using a condom to protect us both). The second factor included two items ($\alpha = .67$) assessing the participant's ability to negotiate the use of a condom with her boyfriend (i.e., It is difficult for me to ask my boyfriend to use a condom; I would be able to refuse to have sex with my boyfriend if he would not use a condom). The third factor included two items ($\alpha = .51$) regarding the participant's ability to buy and carry condoms (i.e., I would go to a store, ask a clerk for help if needed, and buy condoms; If I were going on a date, and I thought that we might have

sex, I would bring a condom with me). Given the poor internal consistency of this subscale (i.e., Factor 3) and low corrected item-total correlations (.34 and .34 respectively for each item), it was eliminated from this measure. Means were established for the two remaining subscales and were then averaged to create a condom self-efficacy score. The psychometric properties and internal consistencies of the two subscales can be found in Tables 16 and 17.

To represent a participant's sexual gender norms score, the participant's sexual gender role score and condom self-efficacy score ($r=.80$, $p<.01$) were standardized to compute an average scale score. Low scores represented traditional sexual gender norms, and high scores indicated liberal sexual gender norms. The mean sexual gender norms score was used with the regression analyses.

Table 16

Psychometric Properties of Condom Negotiation with a New Partner Subscale

Scale Items	Item Means	Item SD	Corrected Item-Total Correlations
1. Even if I had been drinking I would ask a new partner to use a condom.	4.49	1.03	.59
2. If I was about to have sex with someone, I would suggest using a condom to protect us both.	4.71	.71	.62
3. I feel comfortable telling a new partner that I will not have sex unless we use a condom.	4.56	.95	.54
Alpha = .74	Scale Mean = 13.76		Scale SD = 2.20

Table 17

Psychometric Properties of Condom Negotiation with Boyfriend Subscale

Scale Items	Item Means	Item SD	Corrected Item-Total Correlations
1. It is difficult for me to ask my boyfriend to use a condom. (R)	4.34	1.14	.51
2. I would be able to refuse to have sex with my boyfriend if he would not use a condom.	3.72	1.33	.51
Alpha = .67	Scale Mean = 8.07	Scale SD = 2.15	

Note. (R) = Item was reverse scored.

Religion

Religion was assessed for this study using three scales (see Appendix O & P: Religion Measures). The first scale assessed degree of religiosity, and consisted of a modified version of Kenny, Vaughn and Cromwell's (1977) religious inventory. The measure has three dimensions: (1) guidance and participation in personal and family life (e.g., I pray privately; My life is guided by the religious beliefs I learned when I was young), (2) media forms of religion (e.g., I watch religious services on television; I listen to religious music), and (3) participation in religious community (e.g., I attend religious services; I take part in various activities offered at my church). Several of the original items were reworded for this study so that they would be in the present tense. In addition, one item was added to the original scale: "My religious beliefs help guide my everyday behavior." The modified scale has 13 items to which participants responded using a 5-point Likert type scale of (1) never to (5) always (alpha = .87). To assess respondent's religious attitudes and activities, an average scale score of all 13 items was

computed, with a high score indicating strong religious guidance and active church participation. Table 18 contains the psychometric properties and internal consistencies of the scale.

Table 18

Psychometric Properties of Religious Guidance and Involvement Scale

Scale Items	Item Means	Item SD	Corrected Item-Total Correlations
1. I attend religious crusades, revival meetings or missions.	1.71	.88	.87
2. I attend religious services.	2.94	1.17	.86
3. I watch religious services on television.	1.43	.69	.88
4. I pray privately.	4.08	1.05	.87
5. I pray with my family.	2.31	1.23	.87
6. I listen to religious music.	1.61	.81	.87
7. My religious beliefs have helped me understand my life.	3.26	1.18	.85
8. I contribute money to my church.	2.78	1.17	.86
9. I take part in various activities offered at my church.	1.94	1.06	.86
10. My life is guided by the religious beliefs I learned when I was young.	3.08	1.20	.86
11. I feel that religion has helped my relationship with my partner.	2.62	1.28	.85
12. I feel that religion has helped me get ahead in life.	3.25	1.23	.85
13. My religious beliefs help guide my everyday behavior.	3.13	1.14	.85
Alpha = .87	Scale Mean = 34.15	Scale SD = 8.94	

Given the time specific nature of the outcome variables for this study, a second scale was developed to assess degree of religiosity as a time specific construct. A five-item scale was created to measure a woman's level of religious involvement and guidance, in the last 30 days of being interviewed (see Appendix G: Religion Measures). Items from Kenny, Vaughn and Cromwell's (1977) religious inventory were adapted to include this time factor (e.g., In the last 30 days, how often did you pray with your family?; In the last 30 days, how often did you contribute money to your church?). To improve the internal consistency of this scale, three items were deleted due to corrected item total correlations below .40: (1) In the last 30 days, how often did you pray with your family?, (2) In the last 30 days, how often did you listen to religious music?, and (3) In the last 30 days, how often did your religious beliefs help you understand your life? Responses for the two remaining items ranged from (1) never to (5) daily, with higher scores indicating active participation in religious activities ($\alpha = .80$). The 30-day religiosity score was the mean of the two items. Table 19 contains the psychometric properties and internal consistencies of the scale.

The last measure used to assess religion was a 16-item scale constructed to examine the degree to which a respondent believed in fate orientation. Many of the items were adapted from locus of control scales on health beliefs (Castro, Furth, & Karlow, 1984; Wallston & Wallston, 1984). In addition, several items were modified from the Health Responsibility Scale developed by Castro et al. (e.g., I am responsible for my own health; Illness occurs because God wills it) (1984), and some items were adopted from existing an fate orientation scale (e.g., I can avoid becoming infected with

Table 19

Psychometric Properties of 30-day Participation Scale

Scale Items	Item Means	Item SD	Corrected Item-Total Correlations
1. In the last 30 days, how often did you attend religious services (e.g., mass, bible class)?	1.96	.86	.67
2. In the last 30 days, how often did you contribute money to your church?	1.74	.75	.67
Alpha = .80	Scale Mean = 3.70	Scale SD = 1.48	

HIV) (Marin et al., 1993b). A 6-point Likert scale of (1) strongly disagree to (6) strongly agree was used for this measure. Nine items were reverse coded so that a high mean score would represent a woman who believed God controlled her destiny (see Table 20 for items that were reverse coded).

Given low corrected item-total correlations on this scale (see Table 20), a factor analysis using a varimax rotation was performed to determine if the scale was unidimensional. Six items did not load highly on any of the generated factors so they were removed from the measure (see Table 20 for deleted items). A second factor analysis yielded four factors. The first factor included 3 items ($\alpha = .66$) regarding the participant's personal responsibility for becoming infected with HIV (e.g., I am to blame if I become infected with the AIDS virus; I am responsible for not becoming infected with HIV). The second factor included 2 items ($\alpha = .56$) regarding a participant's perception of God's control over her destiny (i.e., I have no control over my life because God control's my destiny; I control my destiny, not God). The third factor included three

Table 20

Psychometric Properties of Fate Orientation Scale

Scale Items	Item Means	Item SD	Corrected Item-Total Correlations
1. I am responsible for what occurs in my life. (R) *	1.46	.69	.25
2. I have no control over my life because God controls my destiny.	2.65	1.42	.37
3. Good things occur in my life because God wills it. *	4.07	1.24	.13
4. I control my destiny, not God. (R)	3.34	1.34	.24
5. It is a matter of chance, if good things happen in my life. *	2.99	1.27	.21
6. It is God's will if bad things happen in my life. *	3.18	1.47	.20
7. If I take the right actions, I can prevent bad things from occurring in my life. (R) *	2.59	1.09	.29
8. I have the ability to make good things happen in my life. (R) *	1.97	.88	.25
9. I am to blame if I become infected with the AIDS virus. (R)	2.32	1.16	.34
10. People become infected with HIV because they do not take care of themselves. (R) *	3.00	1.54	.17
11. It is a matter of chance if you become infected with the AIDS virus. *	2.78	1.42	.41
12. I am responsible for not becoming infected with HIV. (R)	1.97	.80	.46
13. People can control whether or not they become infected with HIV. (R) *	2.71	1.34	.29

Table 20 (cont'd)

Scale Items	Item Means	Item SD	Corrected Item-Total Correlations
14. If I take the right actions, I can avoid becoming infected with the AIDS virus. (R)	1.99	.94	.40
15. If it's meant to be, I will become infected with HIV. *	2.94	1.39	.52
16. People get infected with HIV because God wills it. *	2.12	1.13	.52
Alpha = .71	Scale Mean = 42.07	Scale SD = 8.43	

Note. (R) = Item was reverse scored.

* = Item removed from measure due to low factor loadings or low subscale

items ($\alpha = .41$) regarding the participant's belief in luck (e.g., It is a matter of chance, if good things happen in my life; If I take the right actions, I can prevent bad things from occurring in my life). The fourth factor included 2 items ($\alpha = .40$) regarding the participant's personal sense of responsibility for her life (i.e., I am responsible for what occurs in my life; I have the ability to make good things happen in my life). Given the poor reliabilities of Factors 3 and 4 and low corrected item total correlations ranging from .23 to .26, they were eliminated from this measure (see Table 20 for deleted items). A mean fate orientation score was computed by averaging the means of Factor 1 and 2. Tables 21 and 22 contain the psychometric properties and internal consistencies of these two subscales. Two separate religion mean scores were used for this study. The first score used for analyses was the mean fate orientation score. A second religion score which indicated degree of religiosity, was created by averaging the religious inventory mean score with the 30 day religiosity mean score. Both mean

Table 21

Psychometric Properties of Personal Responsibility Subscale

Scale Items	Item Means	Item SD	Corrected Item-Total Correlations
1. I am to blame if I become infected with the AIDS virus. (R)	2.32	1.16	.67
2. I am responsible for not becoming infected with HIV. (R)	1.97	.80	.44
3. If I take the right actions, I can avoid becoming infected with the AIDS virus. (R)	1.99	.94	.58
Alpha = .66 Scale Mean = 6.28 Scale SD = 2.26			

Note. (R) = Item was reverse scored

Table 22

Psychometric Properties of Destiny Subscale

Scale Items	Item Means	Item SD	Corrected Item-Total Correlations
1. I have no control over my life because God controls my destiny.	2.64	1.42	.39
2. I control my destiny, not God.	3.34	1.34	.39
Alpha = .56 Scale Mean = 5.98 Scale SD = 2.31			

scores were used for the regression analyses.

Incongruency of sexual gender norms

Incongruent sexual gender norms was measured using an 8-item scale developed specifically for this study (see Appendix O & P: Sexual Gender Norms Incongruency Measure). The eight items were produced by reviewing and obtaining statements from the literature on the struggle Latinas experience trying to adhere to traditional Latino

roles for women (Flores-Ortiz, 1994; Marin & Flores, 1994). Utilizing a 6-point Likert scale (1= strongly disagree, 6 = strongly agree), participants were asked to identify the extent to which each item described their conflict regarding traditional gender roles. To determine if the scale was unidimensional, a factor analysis using varimax rotation was conducted. Two items did not load highly on any of the generated factors so they were deleted from the measure: (1) Sometimes my desire to be a “ good” Mexican woman conflicts with what I want to do sexually and (2) Sometimes I feel obligated to follow Mexican customs about how women should act even though I disagree with them. A second factor analysis yielded two factors. The first factor included 4 items ($\alpha = .76$) regarding gender role conflict (e.g., I have a difficult time accepting Mexican values about what is appropriate sexual conduct for a woman; I want to be a “good” Mexican woman, but sometimes I feel constrained by Mexican culture). The second factor included 2 items ($\alpha = .77$) regarding gender role limitations (i.e., Mexican culture limits my ability to do things in my life because I am a woman; Sometimes I feel like experimenting sexually, but my cultural values make it difficult for me to do this). Tables 23 and 24 contain the psychometric properties and internal consistencies of these subscales. A mean was computed for each factor and these two means were then used to compute an overall average score for incongruency. Participants with high scores were more likely to have experienced incongruency than participants with low scores. The average incongruency score was used in the regression analyses.

Table 23

Psychometric Properties of Gender Role Conflict Subscale

Scale Items	Item Means	Item SD	Corrected Item-Total Correlations
1. I have a difficult time accepting Mexican values about what is appropriate sexual conduct for a woman.	3.71	1.49	.49
2. I want to be a “good” Mexican woman, but sometimes I feel constrained by Mexican culture.	3.87	1.51	.67
3. I struggle trying to follow Mexican beliefs about how women should act.	3.91	1.58	.56
4. I find my views about the role of women to be in conflict with my cultural background.	4.01	1.41	.53
Alpha = .76 Scale Mean = 15.50 Scale SD = 4.57			

Table 24

Psychometric Properties of Gender Role Limitation Subscale

Scale Items	Item Means	Item SD	Corrected Item-Total Correlations
1. Mexican culture limits my ability to do things in my life because I am a woman.	2.78	1.59	.63
2. Sometimes I feel like experimenting sexually, but my cultural values make it difficult for me to do this.	2.58	1.44	.63
Alpha = .77 Scale Mean = 5.36 Scale SD = 2.74			

Partner's Sexual Gender Norms

A partner's sexual gender norms score was assessed using an 18-item scale developed to examine attitudes and beliefs about sexual gender roles (see Appendix S & T: Sexual Inventory). This scale is identical to the participant's sexual gender roles scale. However, in this case participants were asked the degree to which each item characterized the gender role beliefs and attitudes of their sexual partner. That is, they were asked to share their perception of their partner's sexual gender norms. Moreover, this scale was administered each time a woman identified a new sexual partner. Responses for the items ranged from (1) strongly disagree to (6) strongly agree. In addition, 11 of the 18 items were recoded so that high scores indicated liberal sexual gender norms (see Table 25 for items that were reverse coded).

Due to low corrected item-total correlations (see Table 25), a factor analysis using a varimax rotation was performed to determine if the scale was unidimensional. Seven items did not load highly on any of the generated factors so they were eliminated from the measure (see Table 25). A second factor analysis yielded four factors. The first factor included 5 items ($\alpha = .73$) regarding beliefs about sexual norms for women (e.g., Women should be virgins until they get married; A woman should know very little about sex until marriage). The second factor included 2 items ($\alpha = .67$) regarding partner's beliefs about the use of condoms (e.g., A woman should ask her partner to use a condom; A "good" man always uses a condom). The third factor included 2 items ($\alpha = .61$) regarding partner's beliefs about having children (e.g., It is acceptable if a woman does not want to have children; It is important for a woman to have children).

The fourth factor included 2 items ($\alpha = .27$) regarding appropriate gender roles (e.g., It is a woman's responsibility to buy condoms; It is appropriate for a man to ask his partner for anal sex). Given the poor reliability of Factor 4 and low corrected item total correlations (of .03 and .03 respectively), this subscale was removed from the overall measure (see Table 25 for deleted items). Tables 26-28 contain the psychometric properties and internal consistencies of the three remaining subscales. An overall mean score representing a partner's sexual gender norms was computed using the subscale means from Factor 1, 2, and 3 for each sexual partner identified. This mean score was used for the regression analyses.

Table 25

Psychometric Properties of Partner's Sexual Gender Norms Scale

Scale Items	Item Means	Item SD	Corrected Item-Total Correlations
1. Women should be virgins until they get married. (R)	4.40	1.36	.47
2. A woman should ask her partner to use a condom.	3.99	1.47	.51
3. A woman should know very little about sex until marriage. (R)	4.80	1.18	.58
4. It is acceptable if a woman does not want to have children.	3.58	1.56	.37
5. A "good" woman would not have anal sex. (R)	4.20	1.40	.32
6. A man should determine whether or not birth control is used. (R) *	4.29	1.44	.52
7. A woman that carries condoms in her purse is "loose." (R) *	3.86	1.49	.43

Table 25 (cont'd)

Scale Items		Item Means	Item SD	Corrected Item-Total Correlations
8.	It is acceptable for a man to have many sexual partners. *	3.29	1.55	-.02
9.	It is a woman's responsibility to buy condoms. *	2.57	1.12	.02
10.	It is important for a woman to have children. (R)	2.64	1.39	.26
11.	A man should determine how often a couple has sex. (R) *	3.90	1.52	.39
12.	It is acceptable for a woman to have many sexual partners. *	1.88	.99	.38
13.	Only "loose" women have oral sex. (R)	4.92	1.06	.51
14.	Birth control should not be used so that a woman can bear her partner many children. (R)	4.92	1.15	.39
15.	A "good" man always uses a condom.	3.71	1.42	.35
16.	It is appropriate for a man to ask his partner for anal sex. *	3.83	1.41	-.12
17.	A woman should comply with her partner's wishes to have sex. (R)*	3.60	1.45	.29
18.	It is disrespectful for a man to talk about sex with a woman. (R)*	4.90	1.19	.14
Alpha = .73		Scale Mean = 68.45	Scale SD = 10.44	

Note. (R) = Item was reverse scored.

* = Item removed from measure due to low factor loadings or low subscale alphas.

Table 26

Psychometric Properties of Partner's Beliefs about Women Subscale

Scale Items	Item Means	Item SD	Corrected Item-Total Correlations
1. Women should be virgins until marriage. (R)	4.38	1.37	.47
2. A woman should know very little about sex until marriage. (R)	4.80	1.17	.53
3. A "good" woman would not have anal sex. (R)	4.16	1.40	.45
4. Only "loose" women have oral sex. (R)	4.89	1.09	.63
5. Birth control should not be used so that a woman can bear her partner many children. (R)	4.91	1.18	.42
Alpha = .73 Scale Mean = 23.15 Scale SD = 4.33			

Note. (R) = Item was reverse scored

Table 27

Psychometric Properties of Partner's Beliefs About the Use of Condoms Subscale

Scale Items	Item Means	Item SD	Corrected Item-Total Correlations
1. A woman should ask her partner to use a condom.	3.97	1.47	.50
2. A "good" man always uses a condom.	3.62	1.46	.50
Alpha = .67 Scale Mean = 7.59 Scale SD = 2.54			

Table 28

Psychometric Properties of Partner's Beliefs Regarding Having Children Subscale

Scale Items	Item Means	Item SD	Corrected Item-Total Correlations
1. It is acceptable if a woman does not want to have children.	3.59	1.56	.44
2. It is important for a woman to have children. (R)	2.66	1.40	.44
Alpha = .61 Scale Mean = 6.26 Scale SD = 2.51			

Note. (R) = Item was reverse scored

Use of Alcohol

The alcohol measure used in this study is a modified version of Bolton et al.'s (1992) alcohol index. This adapted index was used to assess the participants' use of alcohol before intercourse during two time frames: (1) in the last year, and (2) at their last four sexual encounters (see Appendix S & T- Sexual Inventory). The index measuring their use of alcohol during the last year consisted of the following questions: (1) Now I would like you to think about the last 12 months and the times that you have had an alcoholic beverage. How often did you drink an alcoholic beverage such as beer, wine or liquor (e.g., mixed drinks, shots) before having sex?, (2) On average during the last 12 months, how many drinks would you say you had before having sex?, and (3) Think about those times that you drank before having sex, how many times were you drunk enough so that you were unable to drive a car or walk straight? For questions 1 and 3, participants responded by using a 5-point Likert type scale of (1) never to (5) almost always. For question 2, participants responded using a 4-point Likert type scale of

(1) 1-2 drinks to (4) more than 6 drinks. In regard to their use of alcohol for their last 4 sexual encounters, participants were asked the following series of questions for each date: (1) On this date did you drink an alcoholic beverage such as beer, wine or liquor (e.g., mixed drinks, shots) before having sex?, (2) How many drinks did you have?, and (3) Were you drunk enough so that you were unable to drive a car or walk straight? For questions 1 and 3, participants responded (0) no or (1) yes. For question 2, participants responded using a 4-point Likert type scale of (1) 1-2 drinks to (4) more than 6 drinks.

Although it had been the researcher's original intent to create sum scores using the three questions for the yearly use of alcohol and the four dates, the non-normal distribution of summed scores indicated the need to use an alternative scoring method (see Table 29 - Summed Scores for Alcohol Use Before Sex). Consequently, the frequency of alcohol use before sex was used to create a yearly alcohol score (see Appendix U & V: Sexual Inventory, item F1n). The responses to this item were recoded into a three item variable: (1) never drank before sex, (2) rarely or sometimes drank before sex, and (3) almost half of the time, or almost always drank before having sex. Furthermore, given that more than half of the women did not drink before having sex for each of their last four sexual encounters, and that few women did drink more than once across the four dates (see Table 30 - Alcohol Use Before Sex Across Four Dates), it was determined that the best scoring method for these data was a dichotomous variable that recognized the use of alcohol across the four dates. In other words, respondents received a score of "0" if they did not drink across the four dates, and a score of "1" if they had a drink on any, or all four of the dates. For the purpose of analyses, the yearly alcohol

Table 29

Summed Alcohol Scores Before Sex

Time Period	Summed Alcohol Score	N	%
Date #1	.00	70	78
	2.00	9	10
	3.00	9	10
	4.00	1	1
	6.00	1	1
Date #2	.00	77	86
	2.00	7	8
	3.00	3	3
	6.00	1	1
	Not Applicable*	2	2
Date #3	.00	74	82
	2.00	9	10
	3.00	2	2
	4.00	3	3
	Not Applicable*	2	2
Date #4	.00	69	77
	2.00	7	8
	3.00	7	8
	5.00	1	1
	6.00	1	1
	Not Applicable**	5	6
Yearly	.00	32	36
	3.00	19	21
	4.00	9	10
	5.00	12	13
	6.00	7	8
	7.00	4	4
	8.00	1	1
	9.00	3	3
	10.00	1	1
	11.00	1	1
	12.00	1	1

Note. * Two women could only remember their last sexual encounter.

** Three women could only remember their last three sexual encounters.

Table 30

Alcohol Use Before Sex Across the Four Dates

Use of Alcohol	N	%
No alcohol	52	58
Alcohol consumed on one date	23	26
Alcohol consumed on two dates	9	10
Alcohol consumed on three dates	4	4
Alcohol consumed on all four dates	2	2

score was used for the regression analyses examining the yearly use of condoms, anal sex and multiple sexual partners. The dichotomous alcohol score (i.e., recent alcohol use score) was used only for the regression analyses examining the women's most recent condom use score.

HIV Sexual Risk Behaviors

In order to acquire information on the sexual practices of this sample, an inventory of their sexual history was obtained (see Appendix S & T - Sexual Inventory and Appendix U & V: Multiple Partner Insert). This inventory chronicled information for the last year and the last four times a participant had sex. The purpose of collecting data across these time frames was to ensure variability in the outcome variables. This measure documented the following information: (1) relationship status, (2) length of relationship, (3) type of relationship, (4) type of intercourse they engaged in (i.e, vaginal and anal sex), (5) participants' use of condoms, (6) number of times they had sex across their last four sexual encounters, (7) type of sexual intercourse they engaged in across these four dates (i.e., vaginal and/or anal sex), (8) the number of times penetration

occurred without the use of a condom, and (9) the number of sexual partners they have had in the last year and across the four dates. Furthermore, this sexual inventory documented descriptive information on the participant and participant partner's sexual risk history.

Use of condoms during vaginal intercourse. Two separate condom use scores were created for this study: a yearly condom use score and a recent condom use score representing their use of condoms in their last 4 sexual encounters. In order to assess participants' use of condoms for vaginal intercourse in the last year, women were asked the following question, "In the last 12 months, how often have you used a condom during vaginal intercourse?" Participants responded using a 5-point Likert type scale of (1) never to (5) always. Yet, given the non-normal distribution of this item (see Table 31 - Frequency of Yearly Condom Use), responses were recoded as a three-level variable of (1) never, (2) sometimes (i.e., rarely, sometimes, and most of time), and (3) always.

In addition, a condom use score for participant's last four sexual encounters was calculated by asking participants whether or not they used condoms during their last four sexual encounters. Specifically, for each date, respondents were asked how many times they had vaginal intercourse and of those times identified, how many times they actually used a condom. This set of questions was asked for each date specified. A condom use score for each date was computed by dividing the number of times a woman had vaginal intercourse by the number of times she used a condom. Given the non-normal distribution of these data (see Table 32 - Percentage of Condom Use Before

Table 31

Frequency of Yearly Condom Use for Vaginal Intercourse

Use of Condoms	N	%
Never	21	23
Rarely	18	20
Sometimes	10	11
Most of the time	24	27
Always	17	19

Vaginal Intercourse Across the Four Dates), these responses were recoded as a three-level variable of condom use across the four dates: (1) never used a condom, (2) sometimes used a condom, and (3) always used a condom. For the purpose of analyses, both the yearly condom use score and the most recent condom use score (i.e., across the four dates) were used for the ANCOVA and regression analyses.

Anal Intercourse. Given the small number of women that had participated in anal intercourse in the last year and across the four dates (see Table 33 - Percentage of Other Risky Sexual Behaviors), it was decided to examine what factors predicted whether or not a woman had *ever* engaged in anal sex. This decision was based on the larger number of women (n=32) who answered “yes” to the following question: “Have you ever had anal sex or anal intercourse - that is when your partner inserts his penis into your bottom, behind or rectum?” A woman was assigned a score of “0” if she had never engaged in anal intercourse, and a score of “1” if she had engaged in anal intercourse at some point in her life. Logistic regressions were conducted using this anal sex score.

Table 32

Percentage of Condom Use for Vaginal Intercourse Across the Four Dates

Time Period	Percent of Time Condom Used	N	%
Date #1	0	51	57
	50	3	3
	66	1	1
	100	35	39
Date #2	0	46	51
	33	1	1
	50	2	2
	100	37	41
	Not Applicable*	4	4
Date #3	0	49	54
	25	1	1
	50	1	1
	67	1	1
	100	36	40
	Not Applicable	2	2
Date #4	0	49	54
	20	1	1
	50	2	2
	67	2	2
	100	31	34
	Not Applicable**	5	6

Note. * Two women could only remember their last sexual encounter, and two women only engaged in oral sex on this date.

** Three women could only remember their last three sexual encounters.

Multiple Partners. Given that only two women had multiple partners, and that few women (n=7) had different partners across the four dates (see Table 33 - Percentages of Other Risky Sexual Behaviors), it was determined that for the purpose of analyses, only the number of partners a respondent had in the last year would be examined. One

item was used to assess this outcome: "In the last 12 months, how many male sexual partners have you had?" While it had been the researcher's intent to use the response to this question as a continuous variable, the non-normal distribution of responses made this impossible. Consequently, it was decided to dichotomize responses using the following criteria; if a participant had more than one partner a score of "1" was assigned, and a score of "0" was assigned if she only had one partner. This score was used for the logistic regressions.

Pilot

Four pilot interviews were conducted to determine whether or not participants would be able to identify the last six times they had sex and to test the measures developed by the primary researcher for this study (i.e., sexual gender norms scale, gender norms incongruency scale, 30-day items for each construct). Interviews ran anywhere from 25 minutes to an hour. In addition, interviews were conducted with women from different acculturation levels; two interviews were conducted with bilingual, Mexican-American women (i.e., moderately acculturated), one Mexican-American woman that only spoke English (i.e., highly acculturated), and one Mexican woman that primarily spoke Spanish (i.e., less acculturated). These women were recruited from the primary researcher's own personal network in Los Angeles, and were interviewed via the phone. The women were asked to comment on any sections, or items they felt were unclear, and/or difficult to answer.

Table 33

Percentage of Other Risky Sexual Behaviors

Risky Sexual Behaviors	N	%
Anal sex across the four dates		
No	81	90
Yes	9	10
Anal sex in the last year		
No	73	81
Yes	17	19
Use of condoms during anal sex in the last year (n=17)		
Never	6	35
Rarely	3	17
Sometimes	2	12
Always	6	35
Ever engaged in anal sex		
No	58	64
Yes	32	36
Currently having sex with more than one person		
No	88	98
Yes	2	2
Number of partners across the four dates		
1	83	92
2	6	7
3	1	1
Number of partners in the last year		
1	64	71
2	13	14
3	10	11
4	1	1
5	1	1
6	0	0
7	1	1

Once the interviews were completed, the primary researcher reviewed and discussed her findings at a meeting with her dissertation chair, and another member from her dissertation committee. All of the women interviewed had a difficult time remembering the last six times they had sex. Given that most of the women were able to remember the last three to four times they had sex, it was decided to only ask participants' about their last four sexual encounters. Furthermore, it was determined that additional questions should be added to the Sexual Inventory measure to assess participants' use of condoms across the four dates, and to assess whether or not they had sex with more than one person on any of the dates specified. For each date, the following questions were added to the measure: (1) Were there any times during this encounter when there was penetration (i.e., penis entering the vagina) without the use of a condom?, (2) Did he ejaculate inside of your vagina?, (3) Were there any times during this encounter when there was penetration (i.e., penis entering the anus/rectum) without the use of a condom?, (4) Did he ejaculate inside of your anus/rectum?, and (5) Did you have sex with more than one person on this date?

Problems also emerged when participants were asked the 30-day religion questions. The questions were open-ended, and many of the women were unable to give an exact number. Therefore, it was decided to make this section close-ended by providing respondents with the following Likert like scale of: (1) never, (2) 1 to 3 times in the last month, (3) once a week, (4) several times a week, and (5) daily. In addition, a few translation problems were identified in the incongruency scale and gender norms scale. A bilingual Mexican woman was consulted to identify more suitable language for

those problematic items. After some discussion, more appropriate terminology was identified, and these items were modified accordingly.

Results

Descriptive Statistics

The standard deviations and means for all variables in the conceptual model are presented in Table 34. Table 35 includes the zero order correlations of these variables. Furthermore, overall alphas for all measures can be found in Appendix A - Figure 2.

HIV Sexual Risk Behaviors

Overall, the data suggests that a high percentage of subjects are engaging in risky sexual practices. In the last year, 23% of the women and their partners never used condoms during vaginal intercourse and 20% rarely used condoms. Across their last four sexual encounters, 41% of the women and their partners never used a condom. In addition, 17 participants (36%) had engaged in anal sex at least once in their life. Of the women that had engaged in anal sex during the last year, condoms were never used by 35% of the women's partners and 18% rarely used condoms. Nine of the women interviewed had participated in anal sex during their last four sexual encounters and approximately half of them had partners that never used condoms during anal sex. Furthermore, only two women had multiple partners at the time they were interviewed. In the last year, 28% of the women interviewed had more than one sexual partner. Of these women, seven identified two sexual partners, and one woman identified three partners across their last four sexual encounters.

Table 34

Descriptive Statistics

Variable	Mean	Standard Deviation	Minimum	Maximum	Valid N
Linear acculturation	.00	.96	-2.27	2.35	90
Categorical acculturation	1.98	.62	1	3	90
Fate orientation	2.56	.58	1.32	4.00	90
Religiosity	2.23	.64	1.15	3.71	90
Woman's sexual gender norms	.00	.77	-1.97	1.47	90
Partner's sexual gender norms	3.85	.79	1.20	5.67	99
Recent alcohol use	.42	.50	0	1	90
Yearly alcohol use	1.72	.60	1	3	90
Recent use of condoms	.87	.82	0	2	90
Yearly use of condoms	1.96	.65	1	3	90
Anal sex	.36	.48	0	1	90
Number of sexual partners	.29	.45	0	1	90

Table 35

Zero-Order Correlations of Variables Used in Analyses and Significant Demographic Variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Linear acculturation	1.00													
2. Categorical acculturation	.87*	1.00												
3. Fate orientation	.13	.13	1.00											
4. Religiosity	-.10	-.14	-.01	1.00										
5. Woman's sexual norms	.41*	.29*	-.23*	-.06	1.00									
6. Partner's sexual norms	.20*	.15	.01	-.09	.33*	1.00								
7. Recent alcohol use	.15	.14	-.03	.04	.06	.03	1.00							
8. Yearly alcohol	.22*	.26*	-.02	-.06	.04	.03	.59*	1.00						
9. Incongruency	-.13	-.14	-.09	.24*	-.06	.03	.01	.06	1.00					
10. Recent use of condom	-.16	-.18	-.20	.06	.29*	.04	-.08	-.07	.08	1.00				
11. Yearly use of condoms	-.15	-.25*	-.32	.13	.27*	.04	-.08	-.14	.04	.74*	1.00			
12. Anal sex	.20*	.14	-.13	-.04	-.08	-.09	.16	.15	-.08	-.19	-.16	1.00		
13. Number of sexual partners	.10	.18	-.15	-.03	.02	-.08	.24*	.30*	-.17	-.02	.01	.09	1.00	
14. Education	.37*	.34*	-.12	.15	.49*	.23*	.07	.11	.26*	.21*	.24*	-.04	-.01	1.00

p<.05

Examining the Proposed Research Questions

This study attempted to answer the following two research questions: 1) To what extent does acculturation level lead to different HIV sexual risk behaviors? and 2) How does acculturation level contribute to these differences. In order to answer these questions, an ANCOVA and several regression analyses (i.e., logistic and hierarchical) were conducted. To check for a normal distribution of the data, frequencies, means and standard deviations for all demographic and survey items were performed. Histograms and scatter plots were also conducted to evaluate the normality of the variables used in these analyses.

Since education, as with prior research (Mikawa et al., 1992), was found to be positively related to the use of condoms ($r=.21$, $p<.05$), it was covaried from the subsequent analyses where the use of condoms was the outcome variable. This decision was made to better understand the predictors of condom use, above and beyond the variance due to education level.

Differences in HIV Sexual Risk Behaviors Due to Acculturation Level

Hypothesis 1a

The first hypothesis proposed that less acculturated Mexican and Mexican-American women were less likely to use condoms than more acculturated women of Mexican descent. In order to test this hypothesis, an ANCOVA was conducted with the yearly use of condoms as the outcome variable, the categorical acculturation score as a predictor, and education as a covariate. Although significant results emerged, they were contrary to the hypothesis. Even after controlling for education [$F(1,89) = 12.46$, $p<.01$],

the analysis resulted in a significant effect of acculturation level on condom use [$F(2, 89) = 6.74, p < .01$] (see Table 36). Post hoc analysis (i.e., Tukey-HSD) demonstrated that significant differences (mean difference = .54, $p < .05$) existed between women that were highly acculturated (Mean = 1.63) and women that were less acculturated (Mean = 2.17), with lower levels of acculturation being associated with more condom use.

Table 36

Analysis of Covariance of Yearly Condom Use

Source of Variance	SS	df	MS	F	ω^2
Education	4.46	1	4.46	12.46*	.11
Acculturation	4.82	2	2.41	6.74*	.11
Explained	7.05	3	2.35	6.57*	.16
Residual	30.76	86	.36		
Total	37.82	89	.43		

* $p < .01$

Similar results emerged in a second ANCOVA which used the recent condom use score as the outcome variable, the categorical acculturation score as a predictor, and education as a covariate. Even after controlling for education [$F(1, 89) = 7.89, p < .01$], the analysis resulted in a significant effect of acculturation level on condom use [$F(2, 89) = 2.19, p < .05$] (see Table 37). The results from these analyses suggest that less acculturated and highly educated Mexican and Mexican-American are more likely to be in sexual relationships where condoms are used compared to highly acculturated and less educated women of Mexican descent.

Table 37

Analysis of Covariance of Recent Condom Use

Source of Variance	SS	df	MS	F	ω^2
Education	4.89	1	4.89	7.89*	.07
Acculturation	4.40	2	2.20	3.55**	.05
Explained	7.06	3	2.35	3.79*	.09
Residual	53.35	86	.62		
Total	60.40	89	.68		

* p<.01

** p<.05

The results do not support the proposed hypothesis and contradict the findings of previous research which have found a positive relationship between acculturation and condom use (e.g., Ford & Norris, 1993a; Marin & Flores, 1994; Marin, Tschann et al., 1993; Sabogal et al., 1995). In order to better understand this contradictory finding, additional analyses were conducted to interpret these results. Given that other studies have found that using other forms of birth control reduces the likelihood that a woman and her partner will use condoms (Gomez & Marin, 1996; Maticka-Tyndale, 1991), frequencies on birth control type by level of acculturation were conducted. Although no significant differences emerged between acculturation groups, the frequencies did reveal that 50% of the highly acculturated women tended to use other forms of birth control (e.g., birth control pills, Depro Provera, etc.), suggesting that the use of other forms of contraception may interfere with the use of condoms. (see Table 38).

Table 38

Type of Contraception Across Acculturation Groups

	Acculturation (%)		
	Less (n=18)	Moderately (n=56)	High (n=16)
Contraception beside condoms (e.g., birth control pills)	22	29	50
Only use condoms	61	50	31
Currently not using contraception	17	21	19

Hypothesis 1b

The second hypothesis proposed by this study was that as a Mexican or Mexican-American woman's level of acculturation increased, she was more likely to engage in anal sex. This hypothesis was examined by conducting a logistic regression with anal sex as the dependent variable, and the linear acculturation score as the independent variable. The results from this analysis supported the hypothesis. Highly acculturated Mexican and Mexican-American women are more likely to engage in anal sex than less acculturated women (pseudo- $R^2=.01$, $p < .05$)⁵ (see Table 39).

⁵ Since these are logistic regressions, the standard R^2 is not appropriate. However, in SPSS, a pseudo-R is provided (SPSS Manual, 1994), and the square of that is analogous to the R^2 statistic.

Table 39

Logistic Regression Analysis of Engaging in Anal Sex

Variables	B	Wald	Exp (B)	pseudo-R ²	χ^2
Acculturation	.46	3.59	1.58	.01*	3.78*
Constant	-.62	7.50			

* p.<05

Hypothesis 1c

This study also hypothesized that as a Mexican or Mexican-American woman's level of acculturation increased, she was more likely to have multiple sexual partners. A logistic regression was performed to test this relationship. The predictor was acculturation (i.e., linear score), and the outcome was multiple sexual partners. The analysis indicated that there was no significant relationship between acculturation level and multiple sexual partners (pseudo-R²= .00, p<.34).

Direct Predictors of Religion, Sexual Gender Norms and the Use of Alcohol

In order to evaluate the first half of the conceptual model, hierarchical regressions were conducted to examine the impact of acculturation level on religion and participant's sexual gender norms. In addition, a hierarchical regression was performed to test the relationship between gender norm incongruency and the use of alcohol.

Hypothesis 2a

This study proposed there would be a negative relationship between acculturation level and religiosity. A standard hierarchical regression was conducted to test this hypothesis. The linear acculturation score was the independent variable and level of religiosity was the dependent variable. The regression results indicated that

acculturation level was not significantly related to level of religiosity ($\beta = -.10$, $t = -.93$, $p < .35$).

Hypothesis 2b

In addition, this study hypothesized that highly acculturated Mexican and Mexican-American were less likely be fate oriented than less acculturated women. To examine this relationship, a hierarchical regression was conducted with acculturation level (i.e., the linear acculturation score) as the independent variable and fate orientation as the dependent variable. Acculturation level was not significantly related to fate orientation ($\beta = .13$, $t = 1.20$, $p < .23$). The results do not support the hypothesis that acculturation level predicts fate orientation.

Hypothesis 2c

It was also hypothesized that as Mexican and Mexican-American women acculturated to American culture, they were more likely to adopt liberal sexual gender norms. A hierarchical regression, with acculturation level as the independent variable and sexual gender norms as the dependent variable, was utilized to test this hypothesis. The regression results support the hypothesis that highly acculturated Mexican and Mexican-American women are more likely to have non-traditional sexual gender norms than less acculturated women ($\beta = .46$, $t = 4.81$, $p < .01$).

Hypothesis 2d

Moreover, this study hypothesized that there would a positive relationship between gender norm incongruency and the use of alcohol. Separate multiple regressions were conducted for the two alcohol use scores. A logistic regression was conducted to

test this relationship with the recent alcohol use score as the outcome (i.e., their use of alcohol prior to sex across their last four sexual encounters) and gender norm incongruency as the predictor. The regression results indicate that gender norm incongruency was not significantly related to whether or not a Mexican or Mexican-American woman drank alcohol before her most recent sexual encounters (pseudo- $R^2=.00$, $p<.91$). A second analysis using hierarchical regression was performed to investigate this relationship with the yearly use of alcohol score (i.e., the frequency of alcohol use before sex in the last year). Similar findings emerged. Gender norm incongruency was not related to the yearly use of alcohol ($\beta=.05$, $p<.60$). These findings suggest that feelings of conflict over sexual gender norms are not related to Mexican and Mexican-American women drinking alcohol before sexual intercourse.

Given that alcohol use prior to sexual intercourse can potentially lead to risky sexual behaviors (Flores-Ortiz, 1994) and that previous research has found an association between acculturation level and alcohol use (e.g., Flores & Marin, 1994), this relationship was explored by examining the correlation between degree of acculturation (i.e., the linear score) and yearly alcohol use. The correlation was positive and significant ($r=.22$, $p<.05$), suggesting that as Latinas acculturate to American culture, they are more likely to drink alcoholic beverages before having sex.

Direct Predictors of Risky Sexual Behaviors

In order to evaluate the second half of the conceptual model (see Figure 1), multiple regressions were performed to examine the impact of a woman's sexual gender norms and religion on her risky sexual practices.

Hypothesis 2e

This hypothesis proposed that as a woman's level of religiosity increased, she was less likely to be in a relationship where condoms were used during vaginal intercourse. To address this hypothesis, a hierarchical regression was conducted with the yearly use of condoms as the dependent variable, level of education as the covariate in block one, and religiosity as the predictor in block two. The regression results from this analysis ($\beta=.07$, $t=.73$, $p<.46$) do not support the hypothesis. Similar results emerged when conducting a second hierarchical regression with the recent condom use score as the outcome variable, level of education as the covariate in block one, and religiosity as the predictor in block two. The findings indicate that level of religiosity is not related to the use of condoms ($\beta=.01$, $t=.07$, $p<.94$). This suggests that being religious is not related to whether or not a woman and her partner will use condoms.

Hypothesis 2f

This study also proposed that Mexican and Mexican-American women with a greater fate orientation were less likely to be in a relationship where condoms were used during vaginal intercourse. Separate hierarchical regressions were conducted to examine the relationship between fate orientation and the two use of condom scores. The first regression utilized hierarchical regression with the yearly use of condoms as the outcome variable, level of education as the covariate in block one, and fate orientation as the predictor in block two. The findings indicated that even after controlling for education ($\beta=.20$, $t=2.11$, $p<.05$), fate orientation was negatively related to the yearly use of condoms ($\beta=-.27$, $t=-2.79$, $p<.01$). The second hierarchical regression using the recent

condom use score as the outcome variable indicated a trend that fate orientation was negatively related to the use of condoms ($\beta = -.16$, $t = -1.65$, $p < .10$). These findings suggest that women who have a greater fate orientation (i.e., believe that God controls their destiny) are less likely to be in sexual relationships where condoms are used.

Hypothesis 2g

This study also hypothesized that as a Mexican or Mexican-American woman's level of religiosity increased, she was less likely to engage in anal sex. A logistic regression was conducted which included religiosity as the predictor and anal sex as the outcome. The regression results indicated that there was no significant relationship between religiosity and engaging in anal sex (pseudo- $R^2 = .00$, $p < .71$). The regression results suggest that a woman's level of religiosity has no bearing on whether or not she engages in anal sex with her partner.

Hypothesis 2h

Furthermore, this study hypothesized that highly religious women were less likely to have multiple sexual partners than women that were less religious. A logistic regression was conducted which included multiple partners as the outcome and religiosity as the predictor. The findings demonstrate that religiosity is not significantly related to having multiple sexual partners (pseudo- $R^2 = .00$, $p < .75$). The findings suggest that level of religiosity does not impact a woman's decision to have multiple sexual partners.

Hypothesis 2i

It was also hypothesized that Mexican and Mexican-American women with liberal sexual gender norms were more likely to be in relationships where condoms were used than women with traditional sexual gender norms. To test this hypothesis, separate hierarchical regressions were performed for each condom use score. The first hierarchical regression included two blocks. The first block included education as a covariate, the second block included sexual gender norms with the recent condom score as the outcome. This analysis revealed that even after controlling for education ($\beta=.09$, $t=.76$, $p<.45$), liberal sexual gender norms were positively related to the recent use of condoms ($\beta=.25$, $t=2.10$, $p<.05$). Furthermore, a similar hierarchical regression analysis with yearly use of condoms included as the outcome variable suggest there is a weak relationship between sexual gender norms and the use of condoms ($\beta=.20$, $t=1.71$, $p<.09$). These findings support the hypothesis that as a woman adopts more liberal sexual gender norms, she is more likely to be in a sexual relationship where condoms are used.

Hypothesis 2j

Moreover, this study proposed that there would be a positive relationship between sexual gender norms and anal sex. This hypothesis was examined by conducting a logistic regression with anal sex as the dependent variable and sexual gender norms as the independent variable. The analysis indicated that there was no relationship between sexual gender norms and anal sex (pseudo- $R^2=.00$, $p<.45$).

Hypothesis 2k

In addition, this study hypothesized that sexual gender norms would be positively related to a woman having multiple sexual partners. In order to test this hypothesis, a logistic regression was conducted with multiple sexual partners as the dependent variable and sexual gender norms as the independent variable. The results indicate that a woman's sexual gender norms are not related to whether or not a woman has multiple sexual partners (pseudo- $R^2=.00$, $p<.87$).

Mediating Relationships

In order to test the mediating hypotheses in this study, a sequence of regressions were conducted using Baron and Kenny's (1986) procedure for examining mediating relationships. Specifically, three regressions were performed to assess mediation between various predictor variables and outcome variables. The first regression analysis regressed the mediator onto the predictor variable, the second regressed the outcome variable onto the predictor, and the last regressed the outcome variable on both the predictor and mediator. According to Baron and Kenny (1986), mediation occurs when the regression coefficients from the first two regressions are found to be significant, and in the third regression the mediating variable remains significant, even after the predictor variable is entered into the regression equation. Additionally, in the third regression, the beta coefficient between the predictor and outcome variable should decrease, and become insignificant in the presence of the mediator. If all three criteria are met, full mediation has occurred.

Religion

The conceptual model for this study speculated that religious orientation would mediate the relationship between acculturation level and risky sexual behaviors. In particular, this model proposed that religiosity would mediate between three relationships: (1) acculturation level and use of condoms, (2) acculturation level and anal sex, and (3) acculturation level and multiple sexual partners. In addition, fate orientation would mediate the relationship between acculturation level and the use of condoms. A series of multiple regressions were conducted to test these mediating relationships.

Hypothesis 21: Level of Religiosity. To test the mediating potential of religiosity between acculturation level and the yearly use of condoms, a set of hierarchical regressions were performed. Table 40 contains the standardized and unstandardized regression coefficients, t-tests, R^2 and F test for the regression analyses examining the mediating effect of religiosity between acculturation level and the yearly use of condoms. The findings do not provide evidence for mediation as only one of the three criteria was met. Acculturation level was negatively related to the yearly use of condoms ($\beta = -.27$, $t = -2.48$, $p < .01$). Acculturation level was not related to religiosity ($\beta = -.10$, $t = -.93$, $p < .35$) and religiosity was not related to the yearly use of condoms ($\beta = .05$, $t = .48$, $p < .63$). The findings suggest that religiosity does not mediate the relationship between acculturation level and the yearly use of condoms.

Another series of regressions were conducted to investigate if religiosity explains how acculturation level influences the recent use of condoms. The standardized and unstandardized regression coefficients, t-tests, R^2 and F test for this set of regression

analyses can be found in Table 41. The results from these regressions demonstrate that level of religiosity does not mediate the relationship between acculturation level and the recent use of condoms. Specifically, two of the three criteria needed for mediation were not met; acculturation level was not related to religiosity ($\beta = -.10$, $t = -.93$, $p < .35$) and religiosity was not related to the recent use of condoms ($\beta = -.02$, $p < .87$). While acculturation level was related to the recent use of condoms ($\beta = -.28$, $t = -2.53$, $p < .01$), it was in the opposite direction of that hypothesized. The findings suggest that level of religiosity does not mediate the relationship between acculturation level and the recent use of condoms.

Table 40

Mediation Effect of Religiosity on the Yearly Use of Condoms

Outcome, Covariate and Predictors		B	β	t	R ²	F
Step 1						
Outcome:	Religiosity					
Predictor:	Acculturation	-.07	-.10	-.93	.10	.87
Step 2						
Outcome:	Yearly Use of Condoms					
Covariate:	Education	.08	.35	3.21**	.13	6.34**
Predictor:	Acculturation	-.19	-.28	-2.61**		
Step 3						
Outcome:	Yearly Use of Condoms					
Covariate:	Education	.08	.33	3.03**	.13	4.28**
Predictor:	Acculturation	-.18	-.27	-2.48**		
	Religiosity	.05	.05	.48		

* $p < .05$, ** $p < .01$

Table 41

Mediation Effect of Religiosity on the Recent Use of Condoms

Outcome, Covariate and Predictors		B	β	t	R ²	F
Step 1						
Outcome:	Religiosity					
Predictor:	Acculturation	-.07	-.10	-.93	.10	.87
Step 2						
Outcome:	Recent Condom Use					
Covariate:	Education	.09	.31	2.87**	.11	5.42**
Predictor:	Acculturation	-.24	-.28	-2.56**		
Step 3						
Outcome:	Recent Condom Use					
Covariate:	Education	.09	.32	2.82**	.11	3.58**
Predictor:	Acculturation	-.24	-.28	-2.53**		
	Religiosity	-.02	-.02	-.17		

*p<.01, ** p<.05

Hypothesis 2m : Fate Orientation. A series of multiple regressions were conducted to test Hypothesis 2m which proposed that fate orientation would mediate the relationship between acculturation level and use of condoms. Separate analyses were performed for each condom use score (i.e., yearly and most recent condom use). Table 42 contains the standardized and unstandardized regression coefficients, t-tests, R² and F test for the regression analyses examining the mediating effect of fate orientation between acculturation level and the yearly use of condoms. The results demonstrate that fate orientation does not mediate the relationship between acculturation level and the yearly use of condoms. Of the three criteria needed to support mediation, only two were met. A woman's level of acculturation was not significantly related to fate orientation

($\beta=.13$, $p<.23$). However, even after controlling for education ($\beta=.30$, $t=2.79$, $p<.01$), both fate orientation ($\beta=-.25$, $t=-2.52$, $p<.01$) and acculturation level ($\beta=-.23$, $t=-2.17$, $p<.05$) were negatively related to the yearly use of condoms. Although fate orientation did not mediate the relationship between acculturation level and the yearly use of condoms, the results suggest that Mexican and Mexican-American women that are highly acculturated or strongly fate oriented are less likely to be in sexual relationships where condoms are used.

Table 42

Mediation Effect of Fate Orientation on Yearly Use of Condoms

Outcome, Covariate and Predictors	B	β	t	R ²	F
Step 1					
Outcome: Fate Orientation					
Predictor: Acculturation	.08	.13	1.20	.02	1.45
Step 2					
Outcome: Yearly Use of Condoms					
Covariate: Education	.08	.35	3.21*	.13	6.34*
Predictor: Acculturation	-.19	-.28	-2.61*		
Step 3					
Outcome: Yearly Use of Condoms					
Covariate: Education	.07	.30	2.79*	.19	6.60*
Predictor: Acculturation	-.28	-.25	-2.52*		
Fate Orientation	-.16	-.23	-2.17*		

* $p<.01$

Another series of hierarchical regressions were conducted to investigate fate orientation as a mediator between acculturation level and the recent use of condoms.

Table 43 contains the standardized and unstandardized regression coefficients, t-tests, R²

and F test for the regression analyses examining the mediating effect of fate orientation between acculturation level and the recent use of condoms. The regression results do not support the hypothesis that fate orientation mediates the relationship between acculturation level and the recent use of condoms. Only one of the three conditions needed for mediation was present; acculturation level was negatively related to the recent use of condoms ($\beta = -.25$, $t = -2.28$, $p < .05$). A woman's level of acculturation was not significantly related to fate orientation ($\beta = .13$, $p < .23$) nor was fate orientation related to the recent use of condoms ($\beta = -.13$, $t = -1.28$, $p < .20$). The findings suggest that fate orientation does not mediate the relationship between acculturation level and the recent use of condoms, but acculturation negatively impacts the use of condoms.

Hypothesis 2n. Multiple regressions were used to test hypothesis 2n which stated that religiosity would mediate the relationship between acculturation level and anal sex. Table 44 includes the regression results from these analyses. The findings reveal that two of the three requirements needed for mediation were not present. Acculturation level was not found to be significantly associated with level of religiosity ($\beta = -.10$, $p < .35$) and level of religiosity was not found to be significantly associated with whether or not a woman engaged in anal sex (pseudo- $R^2 = .00$, $p < .88$). Acculturation level was found to predict anal sex (pseudo- $R^2 = .01$, $p < .05$). The results suggest that religiosity does not mediate the relationship between acculturation level and anal sex.

Table 43

Mediation Effect of Fate Orientation on Recent Use of Condoms

Outcome, Covariate and Predictors	B	β	t	R ²	F
Step 1					
Outcome: Fate Orientation					
Predictor: Acculturation	.08	.13	1.20	.02	1.45
Step 2					
Outcome: Recent Condom Use					
Covariate: Education	.09	.31	2.87*	.11	5.42*
Predictor: Acculturation	-.24	-.28	-2.56*		
Step 3					
Outcome: Recent Condom Use					
Covariate: Education	.09	.29	2.59*	.13	4.18*
Predictor: Acculturation	-.22	-.25	-2.28*		
Fate Orientation	-.19	-.13	-1.28		

* $p < .05$

Hypothesis 2o. A series of multiple regressions were conducted to test hypothesis 2o which proposed that religiosity would mediate the relationship between acculturation level and multiple sexual partners. The results from these analyses can be found in Table 45. The results demonstrate that religiosity does not mediate the relationship between acculturation level and multiple sexual partners. None of the three criteria needed to support mediation were met; Acculturation level was not related to multiple sexual partners (pseudo-R²= .00, $p < .34$), acculturation level was not related to religiosity ($\beta = -.10$, $p < .35$) and religiosity was not related to multiple partners (pseudo-R²= .00, $p < .92$). The findings indicate that neither acculturation level or religiosity predict that a woman having multiple sexual partners.

Table 44

Mediation Effect of Religiosity on Anal Sex

Outcome, Covariate and Predictors	B	β	t	R ²	F
Step 1					
Outcome: Religiosity					
Predictor: Acculturation	-.07	-.10	-.93	.10	.87
	B	Wald	Exp(B)	pseudo-R ²	χ^2
Step 2					
Outcome: Anal Sex	.46	3.59	1.58	.01*	3.78*
Predictor: Acculturation					
Step 3					
Outcome: Anal Sex					
Predictor: Acculturation	.45	3.49	1.58	.01*	.02
Religiosity	-.05	.02	.95	.00	

* p<.05

Summary of Religion. In summary, the regression analyses do not provide evidence that either fate orientation or level of religiosity mediate the relationship between acculturation level and the use of condoms. However, the findings do suggest though that fate orientation is directly linked to the use of condoms (i.e, the yearly use of condoms), with women that are strongly fate oriented being less likely to be in relationships where condoms are used. Moreover, the regression analyses do not provide evidence that level of religiosity mediates the relationship between acculturation level and engaging in anal sex or between acculturation level and multiple sexual partners.

Table 45

Mediation Effect of Religiosity on Multiple Partners

Outcome, Covariate and Predictors	B	β	t	R ²	F
Step 1					
Outcome: Religiosity					
Predictor: Acculturation	-.07	-.10	-.93	.10	.87
	B	Wald	Exp(B)	pseudo-R ²	χ^2
Step 2					
Outcome: Multiple Partners					
Predictor: Acculturation	.23	.91	1.26	.00	.92
Step 3					
Outcome: Multiple Partners					
Predictor: Acculturation	.23	.85	1.25	.00	.05
Religiosity	-.08	.05	.92	.00	

Sexual Gender Norms

Another component of this study's conceptual model proposed that a woman's sexual gender norms would mediate the relationship between acculturation level and risky sexual behaviors. Specifically, this model hypothesized that a woman's sexual gender norms would mediate the relationships between: (1) acculturation level and use of condoms, (2) acculturation level and anal sex, and (3) acculturation level and multiple sexual partners. In order to address these hypothesizes, a set of multiple regressions were conducted. Separate analyses were conducted for each condom use score.

Hypothesis 2p. This hypothesis theorized that a woman's sexual gender norms would mediate the relationship between acculturation level and the use of condoms. A series of regressions were performed for each condom use score. The first set of regressions tested the hypothesis using a woman's recent condom use score. The unstandardized and standardized regression coefficients, t-tests, R^2 , and F tests for this mediating analyses can be found in Table 46. The findings provide support for partial mediation. Acculturation level was negatively related to the recent use of condoms ($\beta = -.37$, $t = -3.46$, $p < .01$) and was positively related to a woman's sexual gender norms ($\beta = .46$, $t = 4.81$, $p < .01$). A woman's sexual gender norms were positively related to the recent use of condoms ($\beta = .36$, $t = 3.12$, $p < .01$). The results suggest that highly acculturated women are less likely to use condoms than less acculturated women and are more likely to have liberal sexual gender norms. Moreover, women with liberal sexual gender norms are more likely to be in sexual relationship where condoms are used than women with traditional sexual gender norms. Furthermore, when both acculturation level and a woman's sexual gender norms were entered into the regression equation, acculturation level continued to remain significant and surprisingly increased in strength ($\beta = -.37$, $t = -3.46$, $p < .01$). The findings demonstrate that not only does a woman's sexual gender norms partially mediate the relationship between acculturation level and the recent use of condoms, but a cooperative suppressor relationship also exists (Cohen & Cohen, 1975).

Table 46

Mediation Effect of Sexual Gender Norms on the Recent Use of Condoms

Outcome, Covariate and Predictors	B	β	t	R ²	F
Step 1					
Outcome: Sexual Gender Norms	.31	.46	4.81	.21	23.15*
Predictor: Acculturation					
Step 2					
Outcome: Recent Condom Use					
Covariate: Education	.09	.31	2.87*	.11	5.42*
Predictor: Acculturation	-.24	-.28	-2.56*		
Step 3					
Outcome: Recent Condom Use					
Covariate: Education	.05	.17	1.52	.20	7.22*
Predictor: Acculturation	-.32	-.37	-3.46*		
Sexual Gender Norms	.38	.36	3.12*		

*p<.01

According to Cohen and Cohen (1975), two factors denote the presence of cooperative suppression. First, the independent variables are positively correlated with one another, and one independent variable is negatively correlated to the dependent variable and the remaining independent variable is positively correlated to the dependent variable. Alternatively, the two independent variables are negatively correlated to one another and are positively correlated to the dependent variable. Second, each independent variable accounts for more variance in the dependent variable when it is in the presence of the other independent variable “than it does alone” (p.91). In other words, partialing out the variance of X_2 from X_1 that is not related to Y , allows for X_1 to better predict Y . In the same fashion, partialing out the variance of X_1 from X_2 that is not

related to Y, allows for X_2 to better predict Y. This pattern can be identified by examining the correlations between the independent variables and the dependent variable, with the β of the independent variables once they have been entered into the same regression equation. Specifically, cooperative suppression is present if the β of each independent variable increases in “magnitude” from its zero-order correlation with the dependent variable.

In the present study both criteria were met and assist in explaining the contradictory results found when investigating the mediating effect of sexual gender norms on the relationship between acculturation level and the recent use of condoms. First, a correlation matrix of the three variables (with education partialled out) indicated that acculturation level was negatively correlated to the recent use of condoms ($r = -.26$, $p < .01$). Sexual gender norms were positively correlated to both the recent use of condoms ($r = .22$, $p < .05$) and acculturation level ($r = .29$, $p < .01$). Second, the relationships between the independent variables and the dependent variable increased in strength when both acculturation level and sexual gender norms were entered into the regression equation (See Table 47). The findings suggest that acculturation level and a woman’s sexual gender norms serve as cooperative suppressors. In other words, when the variance due to acculturation level that is not related to the use of condoms is partialled out from a woman’s sexual gender norms, a woman’s sexual gender norms better predicts the use of condoms. Similarly, partialing out the variance of a woman’s sexual gender norms that is not related to the use of condoms from acculturation level, allows for acculturation level to better predict the use of condoms.

Table 47

Indicators of Cooperative Suppression for Hypothesis 2p: Recent Condom Use Score

Independent and Dependent Variables		Correlations ⁶			β
		1	2	3	Use of Condoms
1.	Acculturation	1.00	.29*	-.26*	-.37*
2.	Woman's Sexual Gender Norms		1.00	.22*	.36*
3.	Recent Use of Condoms			1.00	

* $p < .05$

Another series of regressions were executed to test if a woman's sexual gender norms mediates the relationship between acculturation level and the yearly use of condoms. Table 48 contains the unstandardized and standardized regression coefficients, t-tests, R^2 , and F tests for these regression analyses. Similar to the findings with the recent use of condoms, the results provide support for partial mediation. Even after controlling for education ($\beta = .34$, $t = 3.21$, $p < .01$), acculturation level was negatively related to the yearly use of condoms ($\beta = -.36$, $t = -3.36$, $p < .01$). Acculturation level was positively related to a woman's sexual gender norms ($\beta = .46$, $t = 4.81$, $p < .01$) and a woman's sexual gender norms were positively related to the yearly use of condoms ($\beta = .31$, $t = 2.70$, $p < .01$). As with the previous findings (i.e., the mediating influence of sexual gender norms on acculturation level and the recent use of condoms), the results from these analysis reveal the presence of cooperative suppression. The two criteria necessary for cooperative suppression to occur were present (see Table 49).

⁶ Education was partialled out of these correlations.

Hypothesis 2q. This study also hypothesized that a woman's sexual gender norms would mediate the relationship between acculturation level and whether or not a woman engaged in anal sex. In order to address this hypothesis, a series of multiple regressions were conducted. Table 50 includes the regression results from these analyses. Only two of the three necessary criteria for mediation were present. Acculturation level was found to be positively related to a woman's sexual gender norms ($\beta=.46$, $t=4.81$, $p<.01$) and to a woman having anal sex (pseudo- $R^2=.03$, $p<.01$). A woman's sexual gender norms were not significantly related to a woman having anal sex (pseudo- $R^2=.00$, $p<.11$). The results demonstrate that sexual gender norms do not mediate the relationship between acculturation level and anal sex. However, the results do suggest that highly acculturated women are more likely to engage in anal sex and have liberal sexual gender norms.

Table 48

Mediation Effect of Sexual Gender Norms on the Yearly Use of Condoms

Outcome, Covariate and Predictors	B	β	t	R ²	F
Step 1					
Outcome: Sexual Gender Norms	.31	.46	4.81	.21	23.15*
Predictor: Acculturation					
Step 2					
Outcome: Yearly Use of Condoms					
Covariate: Education	.08	.35	3.21*	.13	6.34*
Predictor: Acculturation	-.19	-.28	-2.61*		
Step 3					
Outcome: Yearly Use of Condoms					
Covariate: Education	.05	.22	1.97**	.20	6.96*
Predictor: Acculturation	-.24	-.36	-3.36*		
Sexual Gender Norms	.26	.31	2.70*		

*p<.01, **p<.05

Table 49

Indicators of Cooperative Suppression for Hypothesis 2q: Yearly Use of Condoms

Independent and Dependent Variables		Correlations ⁸			β
		1	2	3	Use of Condoms
1.	Acculturation	1.00	.29*	-.27*	-.36*
2.	Woman's Sexual Gender Norms		1.00	.18**	.31*
3.	Yearly Use of Condoms			1.00	

*p<.01, **p<.05

⁸ Education was partialled out of these correlations.

Table 50

Mediating Effect of Sexual Gender Norms on Anal Sex

Outcome, Covariate and Predictors	B	β	t	R ²	F
Step 1					
Outcome: Sexual Gender Norms Predictor: Acculturation	.31	.46	4.81	.21	23.15*
	B	Wald	Exp(B)	pseudo-R ²	χ^2
Step 2					
Outcome: Anal Sex Predictor: Acculturation	.46	3.59	1.58	.01**	3.78**
Step 3					
Outcome: Anal Sex Predictor: Acculturation	.65	5.74	1.92	.03*	3.04
Sexual Gender Norms	-.58	2.84	.56	.00	

*p<.01, ** p<.05

Hypothesis 2r. Moreover, this study proposed that sexual gender norms would mediate the relationship between acculturation level and multiple sexual partners. Several multiple regressions were performed to test this hypothesis. The regression results from these analyses can be found in Table 51. Of the three requirements needed for mediation to occur, only one requirement was met; Acculturation level was found to be positively related to a woman's sexual gender norms ($\beta=.46$, $t=4.81$, $p<.01$). Neither acculturation (pseudo-R²=.00, $p<.34$) nor a woman's sexual gender norms (pseudo-R²=.00, $p<.80$) were significantly related to a woman having multiple sexual partners. The findings indicate that a woman's sexual gender norms do not mediate the relationship between acculturation level and multiple sexual partners.

Table 51

Mediating Effect of Sexual Gender Norms on Multiple Sexual Partners

Outcome, Covariate and Predictors	B	β	t	R ²	F
Step 1					
Outcome: Sexual Gender Norms Predictor: Acculturation	.31	.46	4.81	.21	23.15*
	B	Wald	Exp(B)	pseudo-R ²	χ^2
Step 2					
Outcome: Multiple Sexual Partners Predictor: Acculturation	.23	.91	1.26	.00	.92
Step 3					
Outcome: Multiple Sexual Partners Predictor: Acculturation	.26	.95	1.30	.00	.06
Sexual Gender Norms	-.08	.06	.92	.00	

Summary of Sexual Gender Norms. In summary, the findings reveal the presence of cooperative suppression when examining the mediating effect of a woman's sexual gender norms on the relationship of between acculturation level and the use of condoms. The results demonstrate a paradoxical effect of acculturation level on the use of condoms; acculturation level has an indirect positive and a direct negative effect on the use of condoms. First, the findings indicate that acculturation level is negatively related to the use of condoms. Women that are highly acculturated are less likely to be in relationships where condoms are used. Second, the results demonstrate that acculturation level indirectly impacts the use of condoms through a woman's sexual gender norms. However, this relationship is positive; highly acculturated Mexican and Mexican-

American women are more likely to have liberal sexual gender norms and Mexican and Mexican-American women who endorse liberal sexual gender norms are more likely to be in relationships where condoms are used. Additionally, the results demonstrate that a woman's sexual gender norms do not mediate the relationship between acculturation and anal sex or the relationship between acculturation and multiple sexual partners. Yet, the findings do suggest that acculturation positively predicts whether or not a woman had ever engaged in anal sex.

Moderating Relationships

The moderating relationships proposed in this study were examined by observing the following procedures recommended by Baron and Kenny (1986). First, for those predictors or moderators that were not already standardized or coded as dummy variables, a new mean score was computed for those variables by subtracting the overall mean of the variable from each participant's mean score. The procedure is known as centering and is performed to reduce multicollinearity between the independent variables and the interaction term when entered into the regression equation. Second, an interaction term was created for each hypothesis by multiplying the centered predictor and the centered moderating variable. Third, a hierarchical regression was performed for each hypothesis with education as the covariate in block one, both the predictor and moderator in block two and the interaction term in block three. Fourth, if the interaction term was significant when the dependent variable was regressed on all three variables (i.e., predictor, moderator and interaction term), it was established that moderation had occurred.

Hypothesis 2s

Hypothesis 2s theorized that a partner's sexual gender norms would moderate the relationship between a woman's traditional sexual gender norms and the use of condoms during vaginal intercourse. While testing for moderation, a partner's sexual gender norms score was centered by subtracting the overall partner sexual gender norms mean score from each participant's mean score for their partner's sexual gender norms. This new score along with the participant sexual gender norms score (which was previously standardized) were used to compute the interaction term. The standardized and unstandardized regression coefficients, t-tests, R^2 , and F test for the recent use of condoms can be found in Table 52. The results demonstrate that a partner's sexual gender norms do not moderate the effect that a woman's sexual gender norms has on the recent use of condoms. The interaction term for a woman's sexual gender norms and a partner's sexual gender norms was not significant ($\beta=.07$, $p<.58$). Yet, a woman's sexual gender norms remained significantly related to the recent use of condoms ($\beta=.29$, $t=2.48$, $p<.01$).

Similar results emerge when using the yearly use of condoms score as the dependent variable. Table 53 contains the standardized and unstandardized regression coefficients, t-tests, R^2 , and F test for the hierarchical regression using the yearly use of condoms. The interaction term for a woman's sexual gender norms and a partner's sexual gender norms was non-significant ($\beta=.11$, $p<.30$). Once again, the results reveal that a woman's sexual gender norms remain positively related to the use of condoms ($\beta=.20$, $t=2.17$, $p<.05$). Overall, the findings suggest that a partner's sexual gender

norms does not moderate the relationship between a woman's sexual gender norms and the use of condoms. This indicates that women with liberal sexual gender norms are not less likely to use condoms because their partners have traditional sexual gender norms.

Table 52

Moderating Effect of Partner's Sexual Gender Norms on Recent Use of Condoms Score

Outcome, Covariate and Predictors	B	β	t	R ²	F
Step 1					
Outcome: Recent Condom Use					
Covariate: Education	.02	.08	.73	.11	2.94*
Predictor: Woman's Sexual Gender Norms	.29	.29	2.48**		
Partner's Sexual Gender Norms	-.08	-.07	-.76		
Interaction Term	.07	.06	.56		

*p<.05. ** p<.01

Table 53

Moderating Effect of Partner's Sexual Gender Norms on the Yearly Use of Condoms

Outcome, Covariate and Predictors	B	β	t	R ²	F
Step 1					
Outcome: Yearly Condom Use					
Covariate: Education	.03	.11	1.03	.12	3.06*
Predictor: Woman's Sexual Gender Norms	.20	.25	2.17*		
Partner's Sexual Gender Norms	-.06	-.07	-.72		
Interaction Term	.10	.10	1.04		

*p<.05

Hypothesis 2t

This study also proposed that the use of alcohol would moderate the relationship between a woman's sexual gender norms and anal sex. Although it had been the researcher's intent to test this relationship, analyses examining this relationship were not

conducted due to the method used to score anal sex and the use of alcohol. A score for anal sex was computed by examining one question which asked participants whether or not they had ever engaged in anal sex. The use of alcohol scores were computed for two time periods: across four dates and yearly use of alcohol before sex. Considering that the scores captured different time frames, analyses using these scores would result in erroneous conclusions. Subsequently, this hypothesis was not examined.

Hypothesis 2u

A hierarchical regression was conducted to examine the moderating effect of alcohol use on the relationship between a woman's sexual gender norms and multiple sexual partners. If alcohol use moderates a woman having multiple sexual partners, then the interaction effect between the yearly use of alcohol and a woman's sexual gender norms must be significant when multiple sexual partners is regressed on all three variables (i.e., yearly use of alcohol, woman's sexual gender norms and the interaction term). Table 54 includes the standardized and unstandardized regression coefficients, t-tests, R^2 , and F test for this regression. These findings indicate that the use of alcohol does not moderate the effect of a woman's sexual gender norms on multiple sexual partners. The interaction term was not significant (pseudo- $R^2=00$, $p<.60$). However, the results do demonstrate that the use of alcohol is directly related to whether or not a woman has multiple sexual partners (pseudo- $R^2=.03$, $p<.01$). This suggests that women who drink more frequently before sex are more likely to have multiple partners.

Table 54

Moderating Effect of Yearly Alcohol Use on Multiple Sexual Partners

Outcome, Covariate and Predictors		B	Wald	Exp(B)	pseudo-R ²	χ^2
Step 1						
Outcome:	Multiple Sexual Partners					
Predictor:	Woman's Sexual Gender	.11	.11	1.19	.00	.28
	Norms	1.07	5.04	2.93	.03*	
	Yearly Alcohol Use	-.29	.28	.75	.00	
	Interaction Term					

*p<.01

Discussion

The findings from this study reveal a more complex relationship, than originally conceived, between acculturation level and risky sexual practices. Specifically, acculturation was found to have direct and indirect influences on risky sexual behavior. For example, while acculturation level was negatively related to the use of condoms, and when a key mediator was introduced, sexual gender norms, the indirect impact of acculturation level on condom use was positive. More specifically, highly acculturated Mexican and Mexican-American women were less likely to be in sexual relationships where condoms were used. However, revealing the complexity of the relationship between acculturation level and condom use, Mexican and Mexican-American women who were more highly acculturated were more likely to have liberal sexual gender norms, and women with liberal sexual gender norms were more likely to be in sexual relationships where condoms were used. In addition, while more highly acculturated women were less likely to use condoms, they were more likely to have engaged in anal sex at least once, compared to less acculturated women. Highly acculturated women

were also more likely to use alcohol before sexual intercourse. This is particularly concerning because women who used alcohol before engaging in sexual intercourse were more likely to have multiple sexual partners. The results from this study suggest prevention strategies must vary with acculturation level to be useful in preventing the sexual transmission of HIV among women of Mexican descent.

Furthermore, the findings from this study support Marin's (1993) claim that the key factor in the development of culturally appropriate interventions is the identification of cultural beliefs and norms that influence the "targeted" behavior of change. In addition to sexual gender norms, Mexican and Mexican-American women with a strong fate orientation were less likely to be in sexual relationships where condoms were frequently used. This information allows for the creation of intervention strategies that incorporate the group's cultural values, creating a greater opportunity for successful intervention because it is based on the "group's subjective culture" (p. 155). While additional research is necessary to better understand the factors that place Mexican and Mexican-American women at sexual risk for HIV, this study provides a first step in this process.

To What Extent Does Acculturation Level Lead to Different HIV Sexual Risk Behaviors?

The results of the present study both contradict and support prior findings on the risky sexual practices of Latinas. Previous studies on Latinas demonstrate that different acculturation levels lead to different risky sexual behaviors. For example, less acculturated Latinas were less likely, than highly acculturated Latinas, to be in sexual

relationships where condoms were used (Ford & Norris, 1993a; Marin & Flores, 1994; Marin, Tschann et al., 1993; Sabogal et al., 1995). Further, highly acculturated Latinas were more likely, than less acculturated Latinas, to engage in anal sex and/or have multiple partners, compared to less acculturated Latinas (e.g., Marin & Flores, 1994; Sabogal et al., 1995). Although this study does provide evidence supporting some of these relationships, it also contradicts a well-established finding in the literature.

Use of condoms

Contrary to prior research (Ford & Norris, 1993a; Marin & Flores, 1994; Marin, Tschann et al., 1993; Sabogal et al., 1995), the results of this study suggest that highly acculturated Mexican and Mexican-American women were less likely, than less acculturated women, to be in sexual relationships where condoms were used (see Appendix A - Figure 3). A possible explanation for this finding is that highly acculturated women may choose a form of contraception they have control over, which inadvertently places them at sexual risk for HIV (Gomez & Marin, 1996). In the current study, 63% of the highly acculturated women used a form of contraception that was their responsibility (i.e., birth control pills and Depro Provera) compared to 33% of the less acculturated women. This suggests that highly acculturated Mexican and Mexican-American women may effectively reduce the likelihood of pregnancy, while increasing their risk for the transmission of HIV and sexually transmitted diseases.

Another possible explanation is citizenship status. Given the current trend of xenophobia in California (Romero, Wyatt, Chin & Rodriguez, 1998), and the unique

immigrant experience of Mexicans⁷, citizenship status may play an important role in determining what type of birth control these women can access (Romero et al., 1997). For example, Mexican women may not have access to jobs that provide them with the income to pay for contraception such as Depro Provera or birth control pills. Further, an undocumented Mexican woman may not utilize the local public health clinic, which provides a sliding scale fee for contraception, because of fear that she will be reported to the INS (Immigration and Naturalization Services), and deported back to Mexico. Therefore, Mexican women may rely upon the local pharmacy or grocery store for contraception that is sold over the counter such as condoms and spermicide, which she or her partner can purchase for a minimal cost, and without fear of being deported.

Since the use of condoms can reduce the likelihood of becoming sexually infected with HIV (e.g., Hinojos, 1990), future research should investigate what factors contribute to a woman's decision to choose a particular form of birth control. Specifically, researchers should ask about personal (e.g., control over contraception, prevention of STDs, health factors, etc.) and external factors (e.g., cost, access to birth control, partner's reaction, etc.) that influence this decision. This may provide a critical piece of information that can improve current HIV prevention efforts with highly acculturated Mexican and Mexican-American women.

⁷ Compared to other Latino subgroups, Mexicans tend to immigrate to the United States due to the poor economic conditions in Mexico, and come to this country seeking employment opportunities. They also tend to enter the United States without the proper documentation (Fernández Kelly, 1997; Romero et al., 1997).

Consistent with previous research, this study also found that highly educated women were more likely to be in sexual relationships where condoms were used (Mikawa et al., 1992), and tended to be highly acculturated (e.g., Marin & Marin, 1991). These findings may seem contradictory given that highly acculturated women were less likely to use condoms, but when one considers that not *all* educated women are highly acculturated (G. Romero, personal communication, August 8, 1998), these results are reconcilable. For example, in the present study, the most highly educated woman (a Ph.D.) was moderately acculturated. This finding highlights the complexity of the acculturation process, and how education may have differential influence on Latinas' cultural values and beliefs. Moreover, given that college settings promote safer sex practices, and provide easy access to condoms at campus health centers, it is not surprising that highly educated Mexican and Mexican-American women and their sexual partners were more likely to use condoms.

Anal Sex

Supporting previous findings (Flaskerud et al., 1996; Ford & Norris, 1993a), highly acculturated Mexican and Mexican-American women were more likely to have engaged in anal sex at least once (see Appendix A - Figure 4). This finding suggests that as Mexican and Mexican-American women acculturate to American culture, they may acquire a "greater freedom" to sexually experiment (Romero et al., 1997). However, this freedom may result in a greater likelihood of becoming sexually infected with HIV, given that in the last year, two-thirds of the women in this study participated in unsafe anal sex. Considering that unprotected anal sex is a high risk sexual behavior (e.g.,

Nevid et al., 1995), future research should examine what factors predict the use of condoms for anal sex. For example, the use of contraception other than condoms may reduce the likelihood that a couple will have condoms handy (Gomez & Marin, 1996) when engaging in anal intercourse. Couples may also engage in anal sex to prevent pregnancy (Kline et al., 1992). Further, given that some women may engage in anal sex against their will, their partners may not take the precautionary steps necessary to protect them both from the AIDS virus (Romero et al., 1991).

Multiple Sexual Partners

Unlike earlier research (Marin, Tschann et al., 1993; Sabogal, Faigles, & Catania, 1993; Sabogal et al., 1995), acculturation level was not related to the number of sexual partners a woman had in the last year (see Appendix A - Figure 5). Several factors may account for this finding. First, the majority of women in this sample (77%), regardless of acculturation level, were in steady relationships, and many (67%) had been in these relationships for more than 2 years, suggesting that they were likely to be monogamous (Sabogal et al., 1995). Second, the small sample size of this study (n=90) may have contributed to the modest number of women (n=26) that had more than one sexual partner in the last year. However, previous research does indicate that single Mexican and Mexican-American women tend to have a fewer number of sexual partners compared to women from other ethnic groups (de Anda, Becerra & Fielder, 1988; Marin, Tschann et al., 1993; Romero et al., 1998), suggesting that this sample might accurately represent the sexual experiences of Mexican and Mexican-American women.

How Does Acculturation Level Lead to These Different Risky Sexual Practices?

Mediating Relationships

Two cultural factors were examined as mediators between acculturation level and risky sexual behaviors: religion and sexual gender norms. The findings from the current study indicate that a woman's sexual gender norms, but not religion, partially explain how acculturation level leads to unsafe sex. Interestingly, the complexity of the relationship between acculturation level and condom use emerged in the examination of this relationship.

Religion. Religiosity and fate orientation did not mediate the relationship between acculturation level and risky sexual behaviors. Acculturation level was also not found to be related to religiosity. This finding contradicts prior research which suggests that less acculturated Latinas were more likely to attend religious services (Nyamathi et al., 1993), and observe religious practices, compared to highly acculturated Latinas (Marin & Gamba, 1990). Comments made by some of the recently immigrated women may shed some light on this discrepancy. Several of the women commented that in Mexico they frequently attended church services, and participated in different activities in their church, but barriers such as having to depend on others for transportation, and having to work on Sundays has interfered with their ability to be active church members in the United States. Other immigrant women discussed the harsh realities of this country as undocumented immigrants, and commented on being disillusioned. Specifically, they talked about feelings of abandonment by God, and commented that they no longer had faith in God due to these experiences. These remarks suggest these

women may have been highly religious in Mexico, but due to their experiences as immigrants in the U.S. they may no longer have access to a church or care to be involved with religion. Consequently, immigrant women who would have been expected to be less acculturated (e.g., Mikawa et al., 1992), and therefore highly religious, might have been less religious in this sample due to their immigrant experiences. This may explain why the predicted relationship between acculturation level and religiosity did not emerge. Future research should address the potential role immigration may have on this relationship. In particular, length of residency, documentation status and employment should be considered.

Another factor that may account for this finding is the growing number of Latinos converting to fundamentalist Protestant religions (Amaro, 1991; Cadena, 1995; Marin & Gamba, 1990). Ninety-four percent of the women that identified as Protestant in this sample (n=16) were likely to be moderately or highly acculturated Mexican and Mexican-American women. Further, many of these women commented on recently becoming born again Christians. Therefore, women that were anticipated to be less religious due to their acculturation level (e.g., Marin & Gamba, 1990), might have been more religious in this sample due to their recent conversion. This may be another factor that contributed to the hypothesized relationship not being confirmed.

In addition, this study did not find a significant relationship between acculturation level and fate orientation. There is some empirical evidence that highly acculturated Latinas compared to less acculturated Latinas are more likely to believe they can prevent the transmission of the AIDS virus (Marin, Tschann, et al., 1993;

Mikawa et al., 1992). Yet, this study did not find support for this relationship. Several methodological differences between previous studies and the current study may explain this discrepancy. First, the study conducted by Marin et al. (1993) did not directly measure acculturation level. Instead, the language in which the interview was conducted determined a participant's level of acculturation. In other words, language was used as a proxy for acculturation. In contrast, the present study utilized Cuellar et al.'s (1995) acculturation scale, which was extensive and included several dimensions of acculturation. This suggests that language as a sole determinant of acculturation level may not predict fate orientation among single women of Mexican descent. Second, the sample in Mikawa et al.'s (1992) study was comprised of both men (62%) and women (38%) who had recently immigrated to the U.S. from Mexico and Central America. Further, from Mikawa et al.'s (1992) description, it is difficult to determine whether or not the participants in their sample were married, single or both. In comparison, the present study consisted of only single, Mexican and Mexican-American women, with the majority of women being born in the United States (73%). Generalizations from the previous study may not apply to the current sample. This suggests that acculturation level may not be related to fate orientation among unmarried women of Mexican descent. Additional research with this subgroup may provide further support for this finding.

Moreover, the present study did not find evidence that religiosity was related to the use of condoms, anal sex or number of sexual partners. Although the literature on Latinos had speculated that being religious would influence sexual behaviors (e.g., Land,

1994; Worth, 1989; Worth, 1990), the present study does not provide empirical support for this relationship among women of Mexican descent. However, similar results have been found with recent research on HIV/AIDS and Mexican and Mexican-Americans (Organista et al., 1996; Organista et al., 1997; Romero et al., 1997). For example, Romero et al. (1997) found that among single and married women of Mexican descent religiosity was not related to risky sexual behavior such as vaginal intercourse without a condom, anal intercourse and number of sexual partners. Similar, research conducted with Mexican migrant workers discovered that the use of condoms was not related to the importance of religion nor being Catholic (Organista et al., 1996; 1997). This finding suggests that for Mexican and Mexican-American women being religious may not be related to risky sexual behaviors. Future research should examine whether this is also true for other Latino subgroups.

There are several possible explanations as to why religiosity was not related to risky sexual practices. Given that the women in the present sample had already made the decision to have premarital sex, it is possible that they no longer felt obligated to follow additional religious precepts on sexual behavior. This would suggest then that religiosity would not be related to any of the outcomes of this study. Another possible explanation put forth by Mikawa et al. (1992) suggests that Latinos may apply their religious beliefs to certain aspects of their lives and not to others. In particular, they argue that religious beliefs may be separated from everyday behaviors such as sexual intercourse. This explanation may be applicable to the current sample given that many indicated they received some guidance in their life from their religious beliefs (73%), and yet reported

that they did not practice their church's teaching on either premarital sex (67%) or birth control (73%). Further, several of the women commented that although they did not engage in anal sex, their church's edict on anal sex was not a contributing factor in this decision. They made reference to other factors such as discomfort/pain, and disinterest in that particular sexual act.

Additionally, this study provides empirical support for a common, yet previously untested hypothesis, that Latinas with a strong fate orientation were less likely to be in relationships where condoms were used (Forrest et al., 1993; Worth, 1990b). In the current study, Mexican and Mexican-American women who believed that God controlled their destiny, and believed they could not prevent the transmission of HIV, were more likely to be in relationships where unsafe sex was practiced. This finding suggests that some women of Mexican descent may believe preventive measures such as the use of condoms are not useful in avoiding the AIDS virus. In other words, if God has fated them to have this disease, there is nothing they can do to prevent its transmission. How this information can assist with HIV prevention efforts can be found in the section titled "Implications for the Development of Culturally Appropriate HIV/AIDS Prevention Interventions."

Woman's Sexual Gender Norms. Contradictory findings emerged when examining the mediating effect of a woman's sexual gender norms on the relationship between acculturation level and the use of condoms. The results indicate that acculturation level was related to condom use in two very different and paradoxical ways. Highly acculturated Mexican and Mexican-American women were less likely to

be in sexual relationships where condoms were used and were more likely to have liberal sexual gender norms. Yet, Mexican and Mexican-American women with liberal sexual gender norms were more likely to be in sexual relationships where condoms were used. These paradoxical findings highlight the complexity of the acculturation process, and are indicative of a statistical condition known as cooperative suppression (Cohen & Cohen, 1975). Evidently, in the present study, acculturation level and a woman's sexual gender norms shared variance that was not related to the use of condoms. This resulted with the remaining variance for a woman's sexual gender norms being positively related to the use of condoms, and the remaining variance for acculturation level being negatively related to the use of condoms.

One possible explanation for this contradictory finding is citizenship status. Specifically, citizenship status may be an aspect of acculturation level (Romero et al., 1997) that is not related to sexual gender norms, but is negatively related to the use of condoms. Simply put, less acculturated Mexican and Mexican-American women may be more likely to be in relationships where condoms are used because of their citizenship status, and not because of their sexual gender norms. California is currently experiencing a significant number of political and social upheavals with regard to undocumented Latino immigrants (Romero et al., 1998). Several propositions have been passed to restrict services available to these individuals (e.g., Proposition 187), and a greater number of deportations are occurring due to a more stringent boarder patrol, and raids by the INS. Therefore, citizenship status may be affecting the types of birth control that Mexican woman have access to. For example, Mexican women may experience

economic barriers regarding the type of contraception they can access due to the low paying jobs available to immigrant women. In addition, fears of deportation may discourage some undocumented Mexican women from using public health clinics to obtain affordable contraception. Future research may want to compare women of Mexican descent across different states to better examine understand the role of citizenship on this relationship.

Furthermore, this contradictory finding may be indicative of the multifaceted nature of acculturation. Ford and Norris (1993a) point out that in certain parts of the country (e.g., Detroit, New York, Los Angeles) the new culture values and behaviors being adopted by minorities and immigrants may not reflect mainstream culture (i.e., Anglo culture) given the multiethnic composition of these cities. In fact, these groups may be adopting a culture that is specific to that location and this may or may not include mainstream values and beliefs. Future research may want to expand the conceptualization of acculturation and develop other indicators to assess acculturation level.

Regarding other risky sexual practices, the current study did not find support that a woman's sexual gender norms mediates the relationship between acculturation level and multiple sexual partners. Contrary to prior research (Marin, Tschann, Gomez et al., 1993; Sabogal et al, 1993; Sabogal et al., 1995), acculturation level was not found to be significantly related to the number of sexual partners a woman had in the last year. As previously mentioned, the small sample size of this study may have contributed to this insignificant finding. The results also indicate that a woman's sexual gender norms did

not impact the number of sexual partners a woman had in the last year. Although the literature had surmised that a positive relationship existed between these two factors (e.g., Gomez & Marin, 1996), this study does not provide empirical support for this speculation. Perhaps other factors such as sexual confidence and previous sexual experience would be better predictors of whether or not a woman had more than one sexual partner.

Furthermore, the present study did not find evidence that a woman's sexual gender norms mediates the relationship between acculturation level and anal sex. While the findings of this study did support previous research that acculturation level is positively related to anal sex (Flaskerud et al., 1996; Ford & Norris, 1993a), the results do not indicate the a woman's sexual gender norms explains how this relationship occurs. Thus, the findings from this study do not provide empirical support for the assertion in the literature that a woman's sexual gender norms mediates the relationship between acculturation level and engaging in anal sex (Flaskerud et al., 1996; Ford & Norris, 1993a). However, a methodological discrepancy may explain why mediation did not occur. When describing this potential relationship, the literature makes reference to women who regularly participate in anal sex. In contrast, in the present study women who had engaged in anal sex at least once in their life were included in the analysis. As noted in the methods section, this was done due to the small number of women that engaged in anal sex on a regular basis. Additional research with a larger sample may be better able to test this potential mediating relationship.

Moderating Relationships

Two moderators were also examined: the use of alcohol and a partner's sexual gender norms. The findings from the current study indicate that neither the use of alcohol or a partner's sexual gender moderates the relationship between a woman's sexual gender norms and risky sexual behaviors. Interestingly, the use of alcohol was found to directly influence whether or not a woman had multiple sexual partners.

Use of Alcohol. In addition to religion and sexual gender norms, use of alcohol prior to sexual activity was examined. This study suggested that women who were struggling with traditional sexual gender norms would use alcohol to alleviate this tension. However, gender norm incongruency was not found to be related to the use of alcohol prior to sexual intercourse. This finding contradicts focus group data which indicated that women struggling with adherence to traditional sexual gender norms, were more likely to drink before sex to avoid responsibility for their sexual conduct (Flores-Ortiz, 1994). The results from this study suggest that women grappling with this conflict are not any more likely to drink before sex, than women who are not experiencing this friction. Perhaps women who experience gender norm incongruency resolve these conflicting feelings through other means, and therefore, do not need to drink before sexual intercourse. For example, one woman commented that while she still had mixed feelings about having premarital sex, she had decided to become sexually active because it seemed like the most natural thing to do in the context of her relationship. In particular, she made note of the love she shared with her partner, and how those feelings justified her decision to engage in premarital sex. Instead of resolving feelings of

incongruency by using alcohol, she resolved the conflict by focusing on the love she felt for her boyfriend.

Additionally, alcohol use was not found to moderate the relationship between a woman's sexual gender norms, and condom use or multiple sexual partners. While focus group data had suggested that when under the influence of alcohol traditional Latinas were more likely to engage in unsafe sex practices (Flores-Ortiz, 1994), the results of this study do not support this supposition. A possible explanation for this finding is that the overall use of alcohol prior to sexual intercourse was limited in this study, so it may have reduced the likelihood that an interaction effect would be detected. Additional research is necessary to test this hypothesis.

While this study did not find evidence for the use of alcohol as a moderator, it did support prior research which found that the use of alcohol before sex was positively related to the number of sexual partners a woman had (Marin & Flores, 1994). In the current study, women who drank before sexual intercourse were more likely to have had several sexual partners in the last year. Given that multiple sexual partners increases the likelihood of coming into contact with a partner that is HIV positive (Nevid et al., 1995), additional research examining how or when alcohol influences this high risk sexual behavior is essential. Several remarks made by the women in this study may provide a starting point for future research. Some of the women that tended to drink before sexual intercourse commented that they tended to drink in settings such as bars or parties, which was also the setting where they tended to find sexual partners. These statements suggest that the use of alcohol and the context in which alcohol is being used may

precipitate risky sexual behaviors such as multiple sexual partners. Future research should clarify whether it is the environment, the actual use of alcohol or a combination of both that result in Mexican and Mexican-American women having more than one sexual partner.

Partner's Sexual Gender Norms. In the present study, a partner's sexual gender norms did not moderate the relationship between a woman's sexual gender norms and the use of condoms. Focus group data had suggested that even if a woman wanted condoms to be used in a sexual relationship (i.e., a liberal sexual gender norm), this was less likely to occur when her partner had traditional sexual gender norms (Forrest et al., 1993). Yet, this study did not find evidence to support this premise. Perhaps this moderating relationship did not emerge because most of the women in this sample were in relationships with men that had similar sexual gender norms. Or perhaps the small sample size of this study contributed to the interaction term not being significant. Given that sexual decision making for heterosexual couples involves both men and women (Amaro, 1995; Campbell, 1995) and that previous research has found that a partner's negative reaction to safer sex leads to condoms not being used (Gomez & Marin, 1996; Moore et al., 1995), additional research exploring this relationship should be considered.

Implications for the Development of Culturally Appropriate

HIV/AIDS Prevention Interventions

Overall, the findings from this study suggest that among women of Mexican descent some cultural factors have more influence than others on risky sexual behaviors. The results also indicate that different HIV/AIDS prevention strategies targeting

different acculturation groups may be most successful. Mexican and Mexican-American women varied in their risky sexual practices, and in the factors that predicted these behaviors. This implies that a general message of HIV/AIDS prevention may be unsuccessful with women of Mexican descent (e.g., Marin, 1993; Romero et al., 1997).

Acculturation

The results from this study highlight the importance of considering acculturation level when developing HIV/AIDS prevention interventions for women of Mexican descent. Specific acculturation levels were found to be associated with specific risky sexual practices. Highly acculturated Mexican and Mexican-American women were less likely to be in sexual relationships where condoms were used. The use of alternative forms of contraception appear to impact this relationship, with highly acculturated Mexican and Mexican-American women being more likely to use birth control pills and Depro Provera. The implications of this finding are critical when viewed in the context of HIV reduction. It indicates that interventions directed toward highly acculturated Mexican and Mexican-American women need to address both family planning and disease prevention in their efforts to reduce the sexual transmission of the AIDS virus (Gomez & Marin, 1996). Prevention strategies should emphasize not only the use of effective forms of birth control to prevent pregnancy (e.g., birth control pills), but should also highlight the need for women and their partners to use condoms to reduce the transmission of HIV and other STDs.

Further, highly acculturated Mexican and Mexican-American were more likely to have engaged in anal sex at least once, and many of these women engaged in

unprotected anal sex. Prevention messages directed toward highly acculturated Mexican and Mexican-American women need to address the high risk involved with engaging in unprotected anal intercourse. Clinics and doctors that provide contraception should be sure to discuss the need for condoms when engaging in this high risk sexual behavior. Additionally, given that men are ultimately the ones to wear condoms, prevention messages should be geared to men about the high risk involved with unprotected anal intercourse.

Highly acculturated Mexican and Mexican-American women were also more likely to drink alcohol before sexual intercourse. Unfortunately, in the current study, Mexican and Mexican-American women who drank alcohol before sexual intercourse, were more likely to have multiple sexual partners, and were less likely to be in sexual relationships where condoms were used. Obviously, this increases their risk for the heterosexual transmission of the AIDS virus (e.g., Flaskerud et al., 1996). A potential strategy to address this risk might include a forum where highly acculturated Latinas are likely to be found (e.g., clubs, support groups), and where the inhibitory effects of alcohol can be informally discussed. In particular, these campaigns should stress the potential risk involved with having sex with many sexual partners, and how the risk for HIV increases when condoms are not used with each sexual partner.

Religion

Findings demonstrate that the relationship between religion and sexual behaviors is complex. Different elements of religion are differentially related to risky sexual behaviors. This study did not find evidence that religiosity was related to the use of

condoms among women of Mexican descent, although many of the women were Catholic (82%). This implies that religiosity may not be an impediment in HIV/AIDS prevention efforts with less acculturated Mexican and Mexican-American women. In particular, for women of Mexican descent, regardless of acculturation level, strategies promoting the use of condoms may not conflict with their application of Catholic dogma regarding birth control (Mikwawa et al., 1992; Organista et al., 1996; 1997).

Yet, this study did find that Mexican and Mexican-American women with a strong fate orientation were less likely to be in sexual relationships where condoms were used. In other words, women who felt powerless over the transmission of the AIDS virus, and their destiny, were less likely to be in sexual relationships where condoms were used. Several different educational strategies may be necessary to address this cultural barrier. Comments made by some of the women may provide some insight as to what should be included in these prevention efforts. For example, when responding to statements about fate orientation, several of the women made reference to HIV modes of transmission such as mother to child and blood transfusions, which they argued were unavoidable means by which people get infected with the AIDS virus. Their comments indicate that they may not understand that these modes of transmission are less likely to occur now because of technological advances in medicine (The AIDS Knowledge Base, 1997). Further, it suggests they may not understand that these are not the primary modes of transmission among Mexican and Mexican-American women in the United States. In fact, by focusing on these other modes of transmission, they may exacerbate sentiments that they have no control over the transmission of the AIDS virus.

Therefore, one prevention strategy might involve education about the primary modes of HIV transmission within the Mexican and Mexican-American community. This prevention strategy should include two factors. First, it should highlight that sexual intercourse is the primary means by which HIV is transmitted within the Mexican and Mexican-American community. Second, it should emphasize that since sexual contact is the primary mode of HIV transmission among this population, AIDS does not have to be a disease that one leaves up to fate; steps such as the use of condoms can reduce the likelihood of becoming infected with HIV.

Another strategy may focus primarily on promoting AIDS as a preventable disease. For example, this strategy might want to emphasize that AIDS, unlike cancer and other similar diseases which one may be fated to acquire and die from, is preventable. If people follow precautionary steps such as the use of condoms, one can avoid becoming infected with HIV.

Sexual Gender Norms

Mexican and Mexican-American women endorsing cultural sexual gender norms were less likely to be in sexual relationships where condoms were used. This finding highlights why conventional HIV/AIDS education programs may not be successful with Latinas who maintain traditional sexual gender norms (e.g., Nyamathi et al., 1993; Worth, 1989). Simply put, attempts to empower Latinas to negotiate the use of a condom with their partner, within this traditional framework of sexuality, may be impossible. Therefore, prevention efforts aimed at Latinas, adhering to these beliefs, must work within this cultural framework of sexuality.

Accordingly, strategies that may have a better chance of success with traditional Mexican and Mexican-Americans are HIV/AIDS prevention interventions directed toward “couples as a unit” (Nyamathi et al., 1993). These prevention efforts should emphasize cultural values that will make the use of condoms more acceptable. For example, familialism is an important cultural value that might assist with this process. Prevention messages using this specific cultural value should stress that the couple’s families will be highly effected, emotionally and financially, if one of them become infected with HIV. Further, they should stress the possibility of conceiving a child that is HIV positive.

Limitations of the Present Study

Limitations of this study should be acknowledged. First, given that it was a purposive rather than a random sample, the results of this study cannot be generalized to all women of Mexican descent. The methods used to recruit women for this study contribute to this limitation. Churches, social organizations, service providers, and schools within the researcher’s personal network in southern California were utilized to recruit women for this study. Participants also assisted in recruiting additional women from their own personal networks (i.e., snow-balling). Consequently, the findings from this study may be biased toward women of Mexican descent who live in Los Angeles and Orange counties, who belong to a Latino social network, who are involved in and/or participate in Latino events, and feel comfortable discussing their sexual practices. Although these findings may not represent the experiences of all Mexican and Mexican-American women in the United States, they do provide some baseline data on how

acculturation leads to risky sexual behaviors among Mexican and Mexican-American women in southern California.

Another limitation of this study is self-report of sexual behaviors by respondents. Of particular concern with self-report of sexual behaviors is the ability of women to accurately recall their prior sexual experiences (Erickson et al., 1995). In order to address this issue, when scheduling an interview all research assistants were trained to ask participants to bring their personal organizer to the interview, and interviewers also took along a calendar as part of their interview supplies. Many times women's personal organizers were a great source for recall because participants had documented information in their calendars that would allow them to remember their last four sexual encounters. For example, many women had documented dates with their boyfriend, kept records of their menstrual cycle in order to use the rhythm or withdrawal method, and a few women had even made a notation in their personal calendars as to when they had sex. For those women that did not have personal organizers, interviewers presented a calendar to participants, and asked them to use the calendar to assist in their recall of their last four sexual encounters.

An additional drawback of self-report of sexual behaviors is that women may want to portray themselves as being sexually conservative due to concerns that the interviewer may think they are promiscuous (Marin, Gomez et al., 1993). The current study took several steps to minimize this potential problem. First, the introduction of the interview protocol clearly states that the study understands that women have different types of sexual experiences and that the primary goal of the study is to better understand

how Mexican culture influences their individual sexual decision making. Second, only women with friendly dispositions and previous interviewing experience were brought on to the research project as interviewers. Third, all interviewers participated in an intensive training session that provided them with skills to develop rapport with the women they interviewed. These different strategies were utilized to create a safe forum in which participants would feel free to discuss their sexual behavior without fear of being judged. At the conclusion of the interview, women were asked how comfortable they felt talking about their sexual behavior during the interview; ninety percent stated that they felt some level of comfort, suggesting that our strategies were effective.

Another drawback of this study is that a distinction was not made as to why condoms were used in the women's sexual relationships. Participants were only asked to identify the type of contraception they were using at the time of the interview. Consequently, it is unclear from the current study whether condoms were used exclusively for birth control or for both STD prevention and contraception. Unfortunately, this limits the conclusions that can be drawn from this study.

Sample size is another limitation of this study. A small sample size ($n=90$) may have contributed to the limited variance on the following variables: anal sex, multiple sexual partners and the use of alcohol prior to intercourse. However, given that previous research has found that Mexican and Mexican-American women are less likely to engage in these behaviors, compared to women from other ethnic groups (Ford & Norris, 1993; Erickson et al., 1995; Choi et al., 1994; Marin, Gomez et al., 1993; Marin & Posner, 1995; Marin, Tschann et al., 1993; Nyamathi et al., 1993), this sample may

accurately represent the experiences of this population.

Finally, the monetary reimbursement of \$15 for participation in this research may have biased the findings of this study. Participants may have agreed to participate in study simply for the money. However, given that several women did not accept the \$15 reimbursement, and many others had to be convinced to accept the reimbursement, this bias seems minimal.

Conclusion

It is well acknowledged that AIDS is a “preventable disease” (e.g., Gomez & Marin, 1996). Yet, efforts at preventing the sexual transmission of the AIDS virus have had limited success with the Latino community (e.g., Amaro, 1995). The findings from this study suggest that the inclusion of cultural variables may facilitate in the development of effective HIV/AIDS preventions for Mexican and Mexican-American women. Further, it highlights the complex, and influential role acculturation level has in determining the types of risky sexual behaviors that Mexican and Mexican-American engage in. While this study offers an initial examination of the cultural factors that influence risky sexual practices among Mexican and Mexican-American women, additional research is needed to better understand the factors that place Latinas at sexual risk for HIV.

APPENDIX A

Figures 1 - 5

Figure 1: Conceptual Model

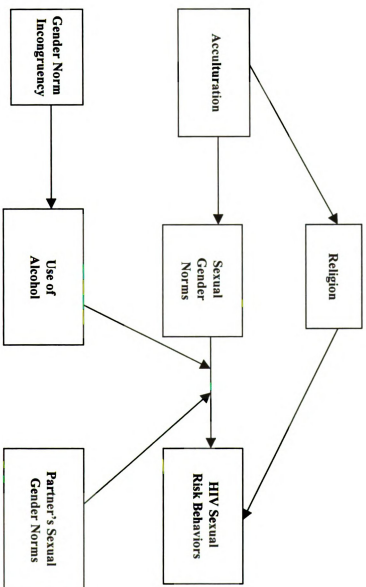


Figure 2: Reliabilities

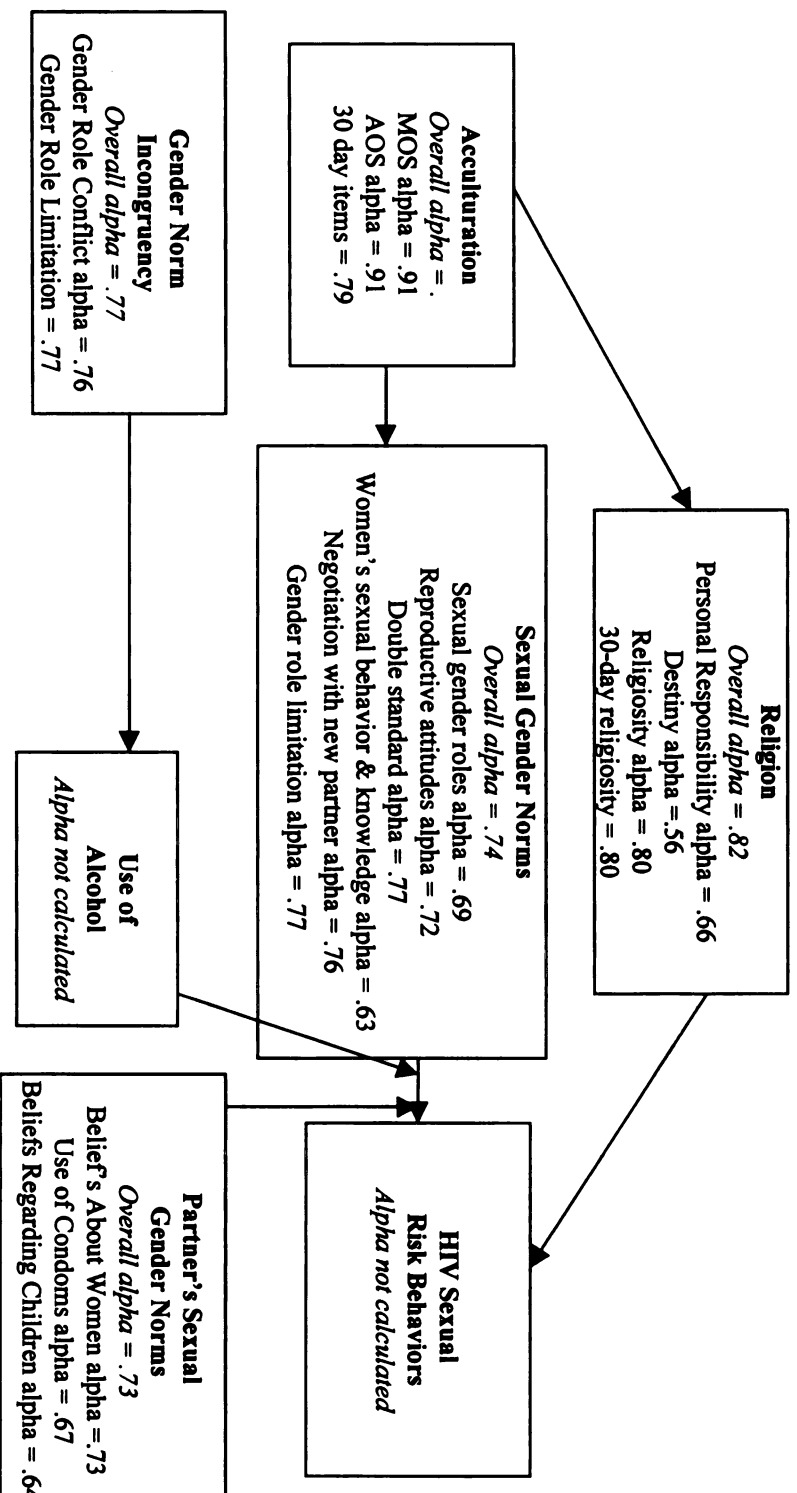


Figure 3: The Use of Condoms

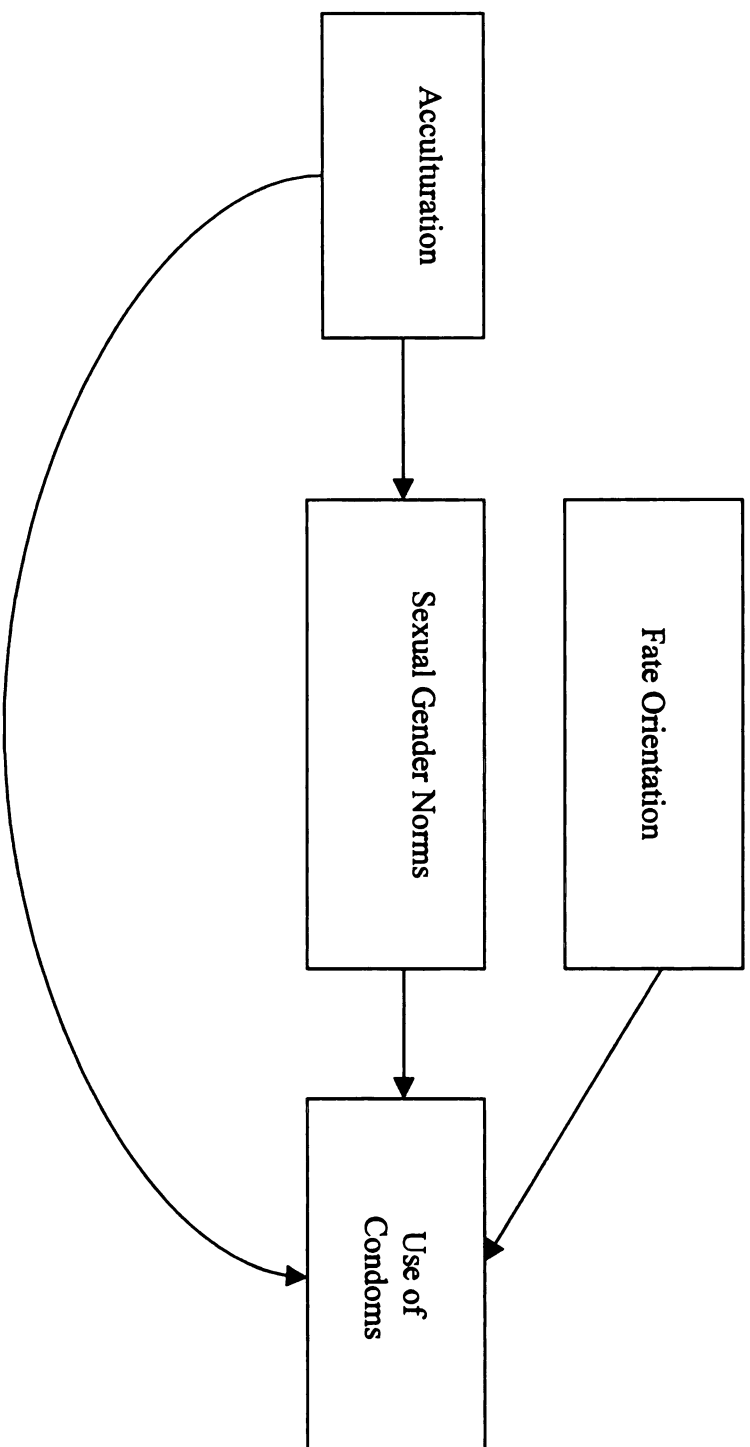


Figure 4: Multiple Partners

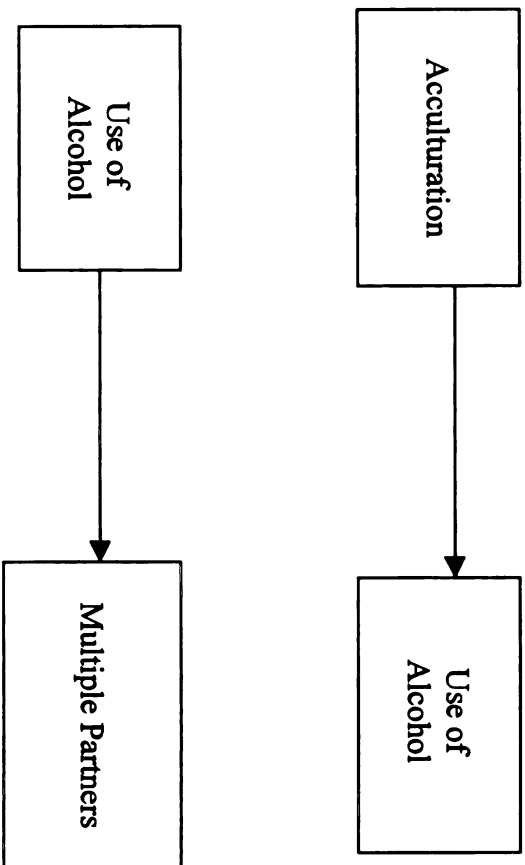
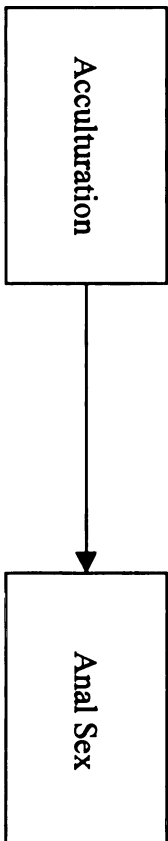


Figure 5: Anal Sex



APPENDIX B

Flyer (English Version)

APPENDIX B

FLYER (ENGLISH VERSION)

- **Are you a woman of Mexican descent?**
- **Are you between the ages of 21 - 30?**
- **Are you dating or in a relationship with a man?**

If you are, here is an opportunity to earn \$15 in less than one hour. Unmarried participants are needed for a study examining how Mexican culture influences romantic relationships.

If you are interested in participating or would like some additional information, please contact Christina Rodriguez by phone at (800) 662-0445 or via the Internet at rodrig79@pilot.msu.edu

APPENDIX C

Flyer (Spanish Version)

- ▶ **Es mujer de ascendencia mexicana?**
- ▶ **¿Tiene entre 21 a 30 años?**
- ▶ **¿Estás noviendo o en una relacion seria con un hombre?**

Si su repuesta es sí a estas tres preguntas, ***tiene la oportunidad de ganar \$15 en menos de una hora.*** Se solicitan participantes solteras para un estudio el cual examinará como la cultura mexicana influye a las relaciones románticas.

Si le interesa participar o le gustaría obtener más información, favor de comunicarse con Christina Rodríguez por teléfono al (800)662-0445 o vía el Internet en rodrig79@pilot.msu.edu

APPENDIX D

Phone Protocol (English Version)

APPENDIX D

PHONE PROTOCOL (ENGLISH VERSION)

Hello. Thank you for showing an interest in this study. My name is Christina Rodriguez and I am a doctoral student at Michigan State University in Ecological-Community Psychology. I am working on my dissertation which is a study that examines the influence of culture on sexual practices of Mexican and Mexican-American women. If you are willing, I would like to schedule an interview with you about the cultural factors that influence your sexual decision making. In this interview, you will be asked about your cultural background and your beliefs and your partner's beliefs about how men and woman should act. You will also be asked about your religious background, your use of alcohol and your sexual practices with your current sexual partner. This interview will be conducted face to face and will take approximately thirty minutes to an hour. The interview will be conducted at your home or at a location convenient for you. You will be paid \$15 for your participation. The interview is completely confidential. Nothing you say will be attributed to you directly. No identifying information will be included in any reports or presentations resulting from this study. You may discontinue your participation at any time before, during or after the interview. Do you have any questions? Given this information, would you be interested in accepting my invitation to participate in this study?

If, no: I would like to restate that your participation will be confidential and nothing you say will be attributed to you directly in the findings. Thank you for taking the time to speak to me. If you were to change your mind about participating, please feel free to call my office at (800) 662-0445. Thank you.

If, yes: Thank you for agreeing to participate in this study. Before I set up a time to conduct an interview with you, I would like to ask you a few questions.

1. What is your ethnic background? _____

If respondent does not identify as a woman of Mexican descent: Thank you for showing an interest in my study, but I am seeking participants that are of Mexican descent only. If you are interested in the results of my study, I would be more than willing to mail you a copy of my results when I have completed my dissertation. Once again, thank you for calling.

2. What is your date of birth? _____

If respondent is born after today's date 1976, she does not meet the age requirement for this study: Thank you for showing an interest in my study, but I am seeking participants that are between the ages of 21 and 30. If you are interested in the results of my study, I would be more than willing to mail you a copy of my results when I have completed my dissertation. Once again, thank you for calling.

3. Are you currently married?
- ☐ No - *Go to question #4.*
- ☐ Yes - Thank you for showing an interest in my study, but I am seeking participants that are single. If you are interested in the results of my study, I would be more than willing to mail you a copy of my results when I have completed my dissertation. Once again, thank you for calling.
4. Are you currently in a romantic relationship with a man?
- ☐ No - *Go to question #5.*
- ☐ Yes - *Go to question #6.*
5. Are you currently in a sexual relationship with a man?
- ☐ No - Thank you for showing an interest in my study, but I am seeking participants that are currently in a romantic relationship with a man or currently in a sexual relationship with a man. At the present time you do not qualify for my study. However, if you are interested in the results of my study, I would be more than willing to mail you a copy of my results when I have completed my dissertation. Once again, thank you for calling.
- ☐ Yes

	Only Spanish	Spanish more than English	Both equally	English more than Spanish	Only English
6. In general, what language do you read and speak? Would you say:	1	2	3	4	5
7. What was the language(s) you used as a child? Would you say:	1	2	3	4	5
8. What language do you usually speak at home? Would you say:	1	2	3	4	5
9. In which language do you usually think? Would you say:	1	2	3	4	5
10. What language do you usually speak with your friends? Would you say:	1	2	3	4	5

11. Average acculturation score: _____

12. Level of acculturation:

☐ Low (1-2.33) ☐ Moderate (2.34-3.66)

☐ High (3.67-5)

13. I would like to know what would be a convenient time and place for you to be interviewed.

Date:

Time:

Location:

Name:

Address:

Phone number:

14. Would you prefer to be interviewed in English or Spanish? _____

15. How did you hear about this study? _____

Thank you very much for your cooperation. I or one of my research assistants will be interviewing you on _____ at _____. Prior to the interview, we will call you to confirm the appointment. If you need to contact me for any reason, please feel free to call me at (800) 662-0445.

APPENDIX E

Phone Protocol (Spanish Version)

APPENDIX E

PHONE PROTOCOL (SPANISH VERSION)

Hola. Gracias por el interés en este estudio. Me llamo Christina Rodriguez y estoy haciendo un doctorado en la Universidad Estatal de Michigan en Psicología Ecológica Comunitaria. Estoy trabajando en mi tesis la cual se basa en un estudio que examina como influye la cultura a las practicas sexuales de mujeres mexicanas o mexico-americanas. Si desea participar, quisiera fijar una cita para entrevistarla sobre como sus decisiones sexuales son influidas por factores culturales. En dicha entrevista se le harán preguntas sobre su formación cultural y sobre las creencias de usted y de su pareja en cuanto al comportamiento apropiado de hombres y mujeres. También se le harán preguntas sobre su formación religiosa, el uso de alcohol y sus compartamientos sexuales en los que ha participado con su pareja. Esta entrevista sera condicida cara a cara y tomara aproximadamente de 30 minutos a una hora. La entrevista se llevará acabo en su hogar o en otro lugar conveniente para usted. Se le pagaran \$15 por su participación. La entrevista sera completamente confidencial. Nada de lo que usted diga será atribuido a usted directamente. Ninguna información que pudiera identificarla sera incluida en reportes o presentaciones a resultado de este estudio. Podra discontinuar su participación en cualquier momento ya sea antes durante o despues de la entrevista. ¿Tiene alguna pregunta? Tomando esta informacion en cuento, ¿acepta mi invitación para participar en este estudio?

Si, no: Quisiera repetir que su participación sera confidencial y que nada de lo que diga sera atribuido a usted en las conclusiones. Le doy las gracias por haber tomado el tiempo para hablar conmigo. Si cambia su decisión de participar, favor de llamar a mi oficina al (800) 662-0445. Gracias.

Si: Gracias por aceptar participar en este estudio. Antes de que fijemos una cita para conducir la entrevista con usted, quisiera hacerle unas cuantas preguntas.

1. ¿Cuál es su origen étnico? _____

Si la participante no se identifica como mujer de ascendencia mexicana: Gracias por haber tomado interes en mi estudio, pero busco participantes que son de ascendencia mexicana solamente. Si le interesa saber los resultados del estudio, le podria mandar una copia de los resultados cuando haya completado mi tesis. De nuevo le doy las gracias por haber llamado.

2. ¿Cual es su fecha de nacimiento? _____
Si la participante es nacida después de la fecha de hoy de 1976, no cumple con los requisitos para este estudio. Gracias po haber tomado interes en mi estudio. Busco participantes que cuya edad es entre 21 a 30 anos. Si le interesa saber los resultados del estudio, le podria mandar una copia de los resultados cuando haya completado mi tesis. De nuevo le doy las gracias por haber llamado
3. ¿Es actualmente casada?
- ☐ No - *Siga a la pregunta # 4*
 - ☐ Si - Gracias por haber tomado interes en este estudio, pero busco participantes que sean solteras. Si le interesa saber los resultados del estudio, le podria mandar una copia de los resultados cuando haya completado mi tesis. De nuevo le doy las gracias por haber llamado.
4. Actualmente, ¿esta en una relacion romantica con un hombre?
- ☐ No - *Pase a la pregunta #5*
 - ☐ Si - *Pase a la pregunta #6*
5. Actualmente, ¿esta en una relacion intima con un hombre?
- ☐ No - Gracias por haber tomado interes en este estudio, pero busco participantes que actualmente esten en una relacion romantica con un hombre. No obstante, Si le interesa saber los resultados del estudio, le podria mandar una copia de los resultados cuando haya completado mi tesis. De nuevo le doy las gracias por haber llamado.
 - ☐ Si

	Solo Espanol	Espanol mas que ingles	Ambos iguales	Ingles mas que ingles	Solo ingles
6. ¿Por lo general, en que idioma habla y lee? Usted diria que:	1	2	3	4	5
7. ¿Cual idioma uso en su ninez? Usted diria que:	1	2	3	4	5
8. ¿Cual idioma usa en su hogar? Usted diria que:	1	2	3	4	5
9. ¿Normalmente en cual idioma piensa? Usted diria que:	1	2	3	4	5
10. ¿Normalmente en cual idioma se comunica con sus amistades? Usted diria que:	1	2	3	4	5

11. Promedio de aculturación: _____

12. Nivel de aculturación:

☐ Bajo (1-2)

☐ Moderado (3)

☐ Alto (4-5)

13. Quisiera saber donde y cuando le sería conveniente para conducir la entrevista.

Fecha:

Hora:

Lugar:

Nombre:

Domicilio:

Número de
teléfono:

14. Prefiere la entrevista en ingles o en español _____

15. Cómo supo de este estudio? _____

Gracias por su colaboarción. Su entrevista se llevara acabo en _____ a
las _____ Sera conducida por mi o por uno de mis asistentes de la investigación.
Antes de la entrevista, se le llamara para confirmar la cita. Si por cualquier razón tiene
que comunicarse connigo, favor de llamar al (800) 662-0445.

APPENDIX F
Training Manual

APPENDIX F
TRAINING MANUAL

TRAINING MANUAL

**Structured Interview on
Acculturation, Mexican Culture and HIV**

Fall 1997 - Michigan State University

BEFORE THE INTERVIEW

1. Once a participant has contacted me and has consented to participate in the study, I will be contacting you and giving you the necessary information (i.e., participant name, ID number and phone number) to conduct the interview.
2. Once you have this information you should call the participant and schedule an interview at a time and place that is convenient for the participant.
3. Make sure to call the participant the day before to confirm that the interview is still on and ask them to bring their day calendar or organizer if they use one.
4. Items needed for an interview:
 - a. An envelope with the \$15 reimbursement for participant
 - b. A survey in the language in which the interview is to be conducted
 - c. Response book
 - d. Calendar
 - e. Two consent forms - one for me and one for the participant
 - f. Receipt for reimbursement
 - g. Plenty of pens
3. Dress casual. You want to make the respondent feel comfortable with you. If you are dressed up, she may feel that she needs to be formal with you and this may affect the manner in which she responds to the questions.
4. Allow yourself plenty of time to arrive at your location and make sure you have the respondent's phone number with you just in case you get lost.

INTERVIEWING

1. When you arrive, please introduce yourself to the respondent and try to arrange to have the interview conducted in an area where you will have some privacy. This will allow for the respondent to feel more comfortable answering personal questions.

2. Questions should be read as they are written. **Please do not** rephrase the question or statement. If you do this it will lower the reliability of the responses.
3. Responses to question or statements:
 - a. **Most of the questions or statements have responses which have been printed out and can be found in the Reponse Book.** Make sure you are on the correct page and that it is in front of the respondent. There are directions throughout the survey telling you which card to show in the Response Book. For the first few questions or statements in each section go ahead and read the possible responses. Hopefully, the participant will read off from the response card placed in front of them and you will no longer need to read each response out loud. However, some respondents may not be able to read because they don't have their glasses or because they are illiterate. If this is the case, please continue to read the responses out loud.
 - b. Whenever there is a **colon (:)** at the end of a statement, please read the responses to the right. For example, in Section E, question 1g the question reads as follows "To what extent do you practice your religion's teaching on premarital sex? Would you say:" At that point you would read the responses to the right which are: "not at all, rarely, sometimes, often, or always."
 - c. **Other (Specify)** - Whenever the participant responds with a response other than those listed and there is an "other" option, please make sure to specify what their response is to that question.
 - d. **Mistakes in coding responses** - There will be times when a respondent will change her response or you miscode an answer. This is not a problem. Simply cross out the incorrect response and circle the correct response. Please make a note of these changes on the last page of the interview.
4. Probing
 - a. This is particularly important when trying to ascertain the last four times the participant had sex. If they are unable to remember, ask them to think about special events or occasions which may have resulted in a sexual encounter. Ask if they have a night or day when they routinely have sex.

4. Atmosphere of Interview
 - a. **Relaxed**
 - b. **Smile**
 - c. Reassure participant of confidentiality

THE SURVEY

INTRODUCTION

1. Once you are settled and ready to start, fill out the front page of the survey. Make sure you provide all the necessary information.
2. Once you have done this, please read the introduction to the study located on the first page.

CONSENT FORM

3. After answering any questions the respondent may have, please read the consent form to the participant. While the consent form is almost a complete duplicate of the introduction, it is important that you read the consent form because we do not know the literacy level of the participants and I want to make sure that they know what they are signing.

DEMOGRAPHIC INFORMATION

4. **Question #2** - Probe if the respondent is vague about their schooling. For example, they may say that they have some high school or college. Follow-up by asking them, what was the last grade they attended in high school or the number of years they completed in college.
5. **Question #4** - Some respondents do not really listen to this question and give their **yearly** income instead of their **monthly** income. If the amount of money they quoted seems high make sure to verify that it is their monthly income. Some respondents live with their parents and do not know their parent's income. If this is the case, simply obtain the respondent's monthly income and make a note of this in the margin.
6. **Question #5** - Make sure that the respondent was born after **October 1976**.
7. **Question #9** - Check all answers that apply. Do not assume that just because a woman is on birth control pills that she does not use another method. For example, some women are on the pill, but do not tell their partner because they want to use condoms as a form of protection against STDs and HIV.

ACCULTURATION

8. **Questions #12 - #15** - This set of questions ends in “e.g.,” statements. Please include them when you read each question. For example, question #12 is “**I enjoy reading (e.g., books in Spanish.**” It should be read as “**I enjoy reading books, for example in Spanish.**”
9. **Questions #18 and #19** - The responses for these statements are a bit awkward. Unfortunately, this is how the author of this measure worded these statements. If the participant seems confused you may want to reread the statement and read the possible options to these statements.
10. **Questions #27-#30** - Sometimes people change their mind about how they want to identify themselves once they hear all four options. Be prepared to go back and make changes. If the respondent would like to change their original answer, simply place an “X” over the original response and “circle” the new response.

SEXUAL GENDER NORMS

11. Some participants may want you to explain or clarify what some of the statements mean. Tell them that you are unable to do so. Tell them to interpret the statement just the way they believe it is meant to be understood.

GENDER NORMS CONGRUENCY

12. Some of these statements are lengthy and the respondent may not understand. Once again, simply reread the item at a slower pace and ask the respondent to interpret it to the best of their ability.

RELIGIOUS BACKGROUND

13. **Questions 1b - 1f** - *Do not* read the responses for these questions. Ask the question and then ask the participant, if one of the listed responses matches her response. You would read the question, for example #1 “What is your religion’s teach on premarital sex, that is sex before marriage?” The participant might say “Against it.” You would verify what they said by saying “In other words, they believe in ‘Abstinence until marriage’” and then you would check that response in the questionnaire.
14. **Questions 1g - 1k** - Some respondents struggle with these questions. I have found that the best way to address these problems is to simply go back to their original responses in Questions 1b-1f and ask whether or not they practice that teaching. For example, Question 1g asks: “To what extent do you practice your religion’s teaching on premarital sex?”. I would then remind the respondent that in Question 1b she noted that her religion promotes the concept of abstinence until marriage, therefore, I would like to know whether or not she practices this specific teaching.
15. **Fate orientation** - In the Spanish version of these questions, some of the questions use the word “toca” meaning it “was meant to be”. However, a

few of the respondents thought this meant “to touch” which gives a very different meaning to the question. If you feel that the respondent has misinterpreted this question, please feel free to clarify the meaning of this particular term.

PARTNER'S SEXUAL GENDER NORMS

16. Make sure the respondent understands that you are not asking about her opinion, but what she believes her partner believes. Some of the women may feel that they do not know how to respond to some of the items. Ask them to simply choose the response that they feel is the most appropriate for him.

FOUR DATES

17. If a respondent answers that she does not use condoms or did not use condoms consistently within one date make sure that the follow-up question about penetration is “yes”. Some respondents are tired by this point and are not listening or do not understand that we are asking about penetration “without” the use of a condom. If there is an inconsistency with the use of condoms and penetration without the use of a condom, please follow up and clarify this point with the respondent.
18. Some women do not know what the word ejaculation means. This is particularly true in Spanish. Please explain that it is the semen that comes out of a man's penis when he has an orgasm. If she still does not understand, I have found that describing what semen looks like seems to clarify the concept (i.e., white substance that comes out of a man's penis).
19. Please follow the instructions given to you throughout this section. This will allow you to ask the right series of questions. Some women may only have one partner so **you do not** need to obtain the demographic information and their sexual gender norms beliefs for each encounter, just the first one. However, if the respondent has had different partners you will fill out a new section for each new partner. This should become clear to you as you go through the survey and read the directions I have provided for you.

LEVEL OF COMFORT

20. Please do not forget to fill out the last section of the interview protocol. Please do this in your car after the interview. I would like to obtain an assessment of how reliable you feel the data is.

APPENDIX G

Consent Form (English Version)

APPENDIX G

PARTICIPANT CONSENT FORM (ENGLISH VERSION)

Michigan State University is currently conducting a study to examine the influence of culture on the sexual practices of Mexican and Mexican-American women.

- 1. I have been asked to participate in this study because I am a single woman of Mexican descent between the ages of 21 and 30.**
- 2. My participation in this study will consist of a face to face interview. I will be asked about my cultural background, my beliefs about how men and women should act and my partner's beliefs about how men and women should act. I will also be asked about my religious beliefs, my use of alcohol and my sexual practices with my partner. This interview will take approximately 30 to 60 minutes and will be conducted at my home or at another convenient location.**
- 3. My involvement in this study has been fully explained to me and I freely consent to participate. I realize that I may discontinue my participation at any time before, during or after the interview.**
- 4. I can refuse to answer any question(s) asked of me before, during or after the interview. I may also ask questions at any time before, during or after the interview.**
- 5. I will be paid \$15 for participating in this interview. Even if I decide to discontinue my participation during or after the interview, I will still be paid \$15 for my time.**
- 6. With my permission, this interview will be audio taped to verify that my responses were correctly recorded on the survey. The tapes will be kept by Christina Rodriguez and will be destroyed upon completion of this project. I also understand that I have the right to ask that my interview not be recorded and to ask that the tape recorder be turned off at any time.**
- 7. Any information I provide will be held in the strictest of confidence. Any information that may identify me will be kept under lock and key in a room separate from the actual data. Only Christina Rodriguez and her research assistants will have access to the data provided in this interview.**

8. Nothing that I say will be attributed to me directly. I further understand that my participation in this study will remain confidential in any report of research findings.
9. Any questions about this study may be asked at any time by contacting:

Christina Rodriguez, M.A.
Michigan State University
Psychology Department
135 Snyder Hall
East Lansing, MI 48824-1117
(517) 353-5015/ (800) 662-0445

Pennie Foster-Fishman, Ph.D.
Michigan State University
Psychology Department
129 Psychology Research Building
East Lansing, MI 48824-1117
(517) 353-5015/ (517) 355-3825

David E. Wright, Ph.D.
Michigan State University
University Committee on Research Involving Human Subjects
232 Administration Building
East Lansing, MI 48824-1046
(517) 355-2180

My signature below indicates that I have read the above 9 items, that any questions I have raised have been answered to my satisfaction, and that I agree to participate in the interview.

Name _____ Date _____

☐ Please mail me a copy of the results of this study at the following address:

APPENDIX H

Consent Form (Spanish Version)

APPENDIX H

PARTICIPANT CONSENT FORM (SPANISH VERSION)

La Universidad Estatal de Michigan esta conduciendo un estudio para examinar como influye la cultura en los hábitos sexuales de mujeres mexicanas y mexico-americanas.

1. Se me ha pedido participar en este estudio porque soy una mujer soltera de ascendencia mexicana entre 21 y 30 años de edad.
2. Mi participación en este estudio consistira de una entrevista cara a cara. Se me haran preguntas sobre mi formación cultural, mis creencias y las de mi pareja en como deben actuar (comportarse) los hombres y las mujeres. También se me haran preguntas sobre mi formación religiosa, mi uso de alcohol y mis compartamientos sexuales en los que ha participado con mi pareja. Esta entrevistá tomara entre 30 a 60 minutos aproximados y tomará lugar en mi casa o en otro lugar conveniente.
3. Mi participación en este estudio ha sido explicada en detalle y doy mi consentimiento voluntariamente. Comprendo que puedo terminar mi participación en cualquier momento, sea antes, durante o después de la entrevista.
4. Puedo negarme a contestar cualquier pregunta(s) antes, durante o después de la entrevista. También puedo hacer preguntas en cualquier momento antes, durante o después de la entrevista.
5. Se me pagará \$15 por participar en esta entrevista. Incluso si decido discontinuar mi participación durante o después de la entrevista, se me pagaran los \$15 por mi tiempo.
6. Con mi permiso, esta entrevista sera grabada para verificar que mis respuestas fueron registradas corectamente en el cuestionario. Las cintas seran guardadas por Christina Rodriguez y seran destruidas a la conclusión de este estudio. También entiendo que tengo el derecho de pedir que mi entrevista no sea grabada y que se apague le grabadora de cinta a cualquier momento.
7. Cualquiera información que provee se guardara con suma confidencia. Tambien comprendo que cualqier información que pueda identificarme sera guardara bajo llave en un cuarto aparte de los datos actuales. Solamente Christina Rodriguez y sus asistentes de investigación tendran aceso a la información procurada en esta entrevista.

8. Nada de lo que diga sera atribuido a mi directamente. Ademas mi participacion en este estudio permanecera confidencial en cualquier reporte de los resultados.
9. Cualquier preguntas sobre este estudio pueden dirigirse:

Christina Rodriguez, M.A.
La Universidad Estatal de Michigan
Departamento de Psciología
135 Snyder Hall
East Lansing, MI 48824-1117
(517) 353-5015/ (800) 662-0445

Pennie Foster-Fishman, Ph.D.
La Universidad Estatal de Michigan
Departamento de Psciología
129 Psychology Research Building
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David E. Wright, Ph.D.
La Universidad Estatal de Michigan
University Committee on Research Involving Human Subjects
232 Administration Building
East Lansing, MI 49924-1046
(517) 355-2180

Al firmar esta forma de consentimiento, yo estoy de acuerdo de participar en esta entrevista.

Nombre _____ Fecha _____

☐ Favor de enviarme una copia de los resultados de este estudio al siguiente domicilio:

APPENDIX I

Demographics (English Version)

APPENDIX I

DEMOGRAPHIC QUESTIONS (ENGLISH VERSION)

SECTION A: DEMOGRAPHIC INFORMATION

I would like to start the interview by asking you some general questions.

1. Are you currently married, divorced, separated, widowed or never been married?

- ☐ 1. Married ☐ 3. Separated ☐ 5. Never been married
☐ 2. Divorced ☐ 4. Widowed

2. What is the highest grade you completed in school?

- | | | | |
|--------------------------------|--------------------|---------------------|---------------------------------|
| [1 2 3 4 5 6] [7 8] | [9 10 11 12] | [13 14 15 16] | [17 18] [19 20 21] |
| Elementary | Jr. High | High School | College
Vocational/Technical |
| | | | Graduate School |

3. Are you currently:

- ☐ 1. Working full-time ☐ 4. Keeping house
☐ 2. Working part-time ☐ 5. In school
☐ 3. Unemployed ☐ 6. Other (Specify): _____

4. What is the total **monthly** income for your household? _____

5. What is your religious denomination?

- | | | |
|---|---|---|
| ☐ 1. Anglican | ☐ 6. Evangelical | ☐ 10. Pentecostal |
| ☐ 2. Baptist | ☐ 7. Lutheran | ☐ 11. Scientology |
| ☐ 3. Brethren | ☐ 8. Methodist | ☐ 12. Other: _____ |
| ☐ 4. Catholic | ☐ 9. Mormon | ☐ 13. None |
| ☐ 5. Church of God | | |

6. What year were you born? _____

7. Where were you born?

- ☐ 1. Mexico
☐ 2. USA
☐ 3. Other (Specify): _____

8. Where was your father born?

- ☐ 1. Mexico
☐ 2. USA
☐ 3. Other (Specify): _____

9. Where was your mother born?

- ☐ 1. Mexico
☐ 2. USA
☐ 3. Other (Specify): _____

10. Are you currently using any of the following forms of birth control?
- | | | |
|--|---|--|
| ☐ 1. Birth control pills | ☐ 6. IUD/Intrauterine Device | ☐ 11. Depro Provera |
| ☐ 2. Condoms | ☐ 7. Rhythm method | ☐ 12. Norplant |
| ☐ 3. Diaphragm | ☐ 8. Female sterilization | ☐ 13. No Method |
| ☐ 4. Douching after intercourse | ☐ 9. Male sterilization | ☐ 14. Other: _____ |
| ☐ 5. Spermicide/Creams/Jellies | ☐ 10. Withdrawal method | |

11. Have you ever been pregnant?

- ☐ 0. No
☐ 1. Yes

12. Have you ever been tested for the AIDS virus?

- ☐ 0. No - **Go to question 13**
☐ 1. Yes - **Go to question 12**
☐ 2. Doesn't know - **Go to question 13**
☐ 3. Not sure - **Go to question 13**

13. Did the test show that you were HIV positive?

- ☐ 0. No
☐ 1. Yes
☐ 2. Doesn't know
☐ 3. Not sure

14. Have you ever been tested for STDs (i.e., sexually transmitted diseases)?

- ☐ 0. No - **Go to question 15**
☐ 1. Yes - **Go to question 14**
☐ 2. Doesn't know - **Go to question 15**
☐ 3. Not sure - **Go to question 15**

15. Did any of the tests show that you were infected with an STD?

- ☐ 0. No
☐ 1. Yes
☐ 2. Doesn't know
☐ 3. Not sure

16. Did you receive a blood transfusion between 1977 and 1985?

- ☐ 0. No
☐ 1. Yes
☐ 2. Doesn't know
☐ 3. Not sure

17. Have you ever injected drugs into yourself with a needle that were not prescribed by a doctor?

- ☐ 0. No
☐ 1. Yes
☐ 2. Doesn't know
☐ 3. Not sure

APPENDIX J

Demographics (Spanish Version)

APPENDIX J

DEMOGRAPHICS (SPANISH VERSION)

SECCIÓN A: INFORMACIÓN DEMOGRÁFICA

Quisiera empezar la entrevista con unas preguntas generales.

1. ¿Actualmente es usted casada, divorciada, separada, viuda o nunca se ha casado?
- ☐ 1. Casada ☐ 3. Separada ☐ 5. Nunca he sido casada
- ☐ 2. Divorciada ☐ 4. Viuda

2. ¿Cuál es el último nivel de educación que completó? (**Entrevistadora- Circule el número que aplica**)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Primaria				Secundaria				Preparatoria				Universidad Politécnica/Vocacional				Escuela de posgrado				

3. Actualmente usted:

- | | |
|---|---|
| ☐ 1. Trabaja tiempo completo
☐ 2. Trabaja tiempo parcial
☐ 3. Es desempleada | ☐ 4. Es ama de casa
☐ 5. Es estudiante
☐ 6. Otro
(Especifique) _____ |
|---|---|

4. ¿Cual es el ingreso **mensual** de su hogar? _____

5. ¿En que año nació? _____

6. ¿Donde nació?

- ☐ 1. México ☐ 2. EEUU ☐ 3. Otro (**Especifique**) _____

7. ¿Dónde nació su padre?

- ☐ 1. México ☐ 2. EEUU ☐ 3. Otro (**Especifique**) _____

8. ¿Donde nació su madre?

- ☐ 1. México ☐ 2. EEUU ☐ 3. Otro (**Especifique**) _____

9. ¿Actualmente utiliza alguno de los siguientes métodos del control de la natalidad/anticonceptivos? (Entrevistadora- Muestre tarjeta A y lea las respuestas. Marque todas las que aplican.)

- | | |
|--|--|
| ☐ 1. Píldoras anticonceptivas | ☐ 9. Esterilización masculina/vasectomía |
| ☐ 2. Condones/preservativos | ☐ 10. Coitus interruptus/sacar o retirar el miembro/salirse/terminar afuera |
| ☐ 3. Diafragma | ☐ 11. Inyecciones (Depro Provera) |
| ☐ 4. Ducha vaginal/lavarse después de la relación | ☐ 12. Norplant, el implante |
| ☐ 5. Espuma/jalea/crema espermicida/tableta espumante | ☐ 13. Ningún método |
| ☐ 6. Dispositivo/aparato intrauterino/T de cobre/espiral/lazo | ☐ 14. Otro: _____ |
| ☐ 7. Ritmo o período a salvo | |
| ☐ 8. Esterilización femenina/ligarse los tubos | |

10. ¿Ha estado alguna vez embarazada/encinta?

- ☐ 0. No
☐ 1. Sí

11. ¿Se ha hecho la prueba del virus del SIDA?

- ☐ 0. No - **Pase a la pregunta 13**
☐ 1. Sí - **Pase a la pregunta 12**
☐ 2. No sé - **Pase a la pregunta 13**
☐ 3. No estoy segura - **Pase a la pregunta 13**

12. ¿Fue positivo su análisis de VIH/SIDA?

- ☐ 0. No
☐ 1. Sí
☐ 2. No sé
☐ 3. No estoy segura

13. ¿Se ha examinado para ver si tiene enfermedades transmitidas sexualmente?

- ☐ 0. No - **Pase a la pregunta 15**
☐ 1. Sí - **Pase a la pregunta 14**
☐ 2. No sé - **Pase a la pregunta 15**
☐ 3. No estoy segura - **Pase a la pregunta 15**

14. ¿Cualquiera de estas examinaciones indicaron que usted estaba infectada?

- ☐ 0. No
☐ 1. Sí
☐ 2. No sé
☐ 3. No estoy segura

15. ¿Recibió una transfusión de sangre entre los años de 1977 al 1985?

- ☐ 0. No
- ☐ 1. Sí
- ☐ 2. No sé
- ☐ 3. No estoy segura

16. ¿Se ha inyectado drogas que no han sido prescritas por un doctor?

- ☐ 0. No
- ☐ 1. Sí
- ☐ 2. No sé
- ☐ 3. No estoy segura

APPENDIX K

Acculturation Measures (English Version)

APPENDIX K

ACCULTURATION MEASURES (ENGLISH VERSION)

SECTION B: ACCULTURATION

Now I would like to ask you a few questions about your cultural background. For each statement, please choose one of the following responses: Not at all, very little or not very often, moderately, much or very often, or extremely often or almost always. Please choose the response that would be most correct for you under most conditions or normal circumstances.

	Not at all	Not very often/ Very little	Some/ Moderately	Very often/ much	Extremely often/ Almost Always
1. I speak Spanish.	1	2	3	4	5
2. I speak English	1	2	3	4	5
3. I enjoy speaking Spanish.	1	2	3	4	5
4. I associate with Anglos.	1	2	3	4	5
5. I associate with Mexicans and/or Mexican Americans.	1	2	3	4	5
6. I enjoy listening to Spanish language music.	1	2	3	4	5
7. I enjoy listening to English language music.	1	2	3	4	5
8. I enjoy Spanish language TV.	1	2	3	4	5
9. I enjoy English language TV.	1	2	3	4	5
10. I enjoy English language movies.	1	2	3	4	5
11. I enjoy Spanish language movies.	1	2	3	4	5
12. I enjoy reading (e.g., books in Spanish).	1	2	3	4	5
13. I enjoy reading (e.g., books in English).	1	2	3	4	5

	Not at all	Not very often/ Very little	Some/ Moderately	Very often/ much	Extremely often/ Almost Always
14. I write (e.g., letters in Spanish).	1	2	3	4	5
15. I write (e.g., letters in English).	1	2	3	4	5
16. My thinking is done in the English language.	1	2	3	4	5
17. My thinking is done in the Spanish language.	1	2	3	4	5
18. My contact with Mexico has been...	1	2	3	4	5
19. My contact with the USA has been...	1	2	3	4	5
20. My father identifies or identified himself as "Mexicano".	1	2	3	4	5
21. My mother identifies or identified herself as "Mexicana".	1	2	3	4	5
22. My friends, while I was growing up, were of Mexican origin.	1	2	3	4	5
23. My friends, while I was growing up, were of Anglo origin.	1	2	3	4	5
24. My family cooks Mexican foods.	1	2	3	4	5
25. My friends now are of Anglo origin.	1	2	3	4	5
26. My friends now are of Mexican origin.	1	2	3	4	5
27. I like to identify myself as a Mexican American.	1	2	3	4	5

	Not at all	Not very often/ Very little	Some/ Moderately	Very often/ much	Extremely often/ Almost Always
28. I like to identify myself as a Mexican.	1	2	3	4	5
29. I like to identify myself as an American.	1	2	3	4	5
30. I like to identify myself as Anglo-American.	1	2	3	4	5
Section B2: Time Specific Acculturation Now I would like to ask you a few more questions about your cultural background.					
	Only Spanish	More Spanish than English	Both Equally	More English than Spanish	Only English
1. In the last 30 days, what was the primary language(s) you spoke at home? Would you say:	1	2	3	4	5
2. In the last 30 days, what was the primary language spoken in the movies and T.V. programs you watched?	1	2	3	4	5
3. In the last 30 days, what language were the radio programs you usually listened?	1	2	3	4	5
Interviewer - Show Card B2 with Responses					
	All Latinos/ Hispanics	More Latinos than Americans	About Half & Half	More Americans than Latinos	All Americans
4. In the last 30 days, the people who have visited you or who you have visited were primarily:	1	2	3	4	5
5. In the last 30 days, the social gatherings/ parties which you have attended have primarily been:	1	2	3	4	5

APPENDIX L

Acculturation Measures (Spanish Version)

APPENDIX L

ACCULTURATION MEASURES (SPANISH VERSION)

SECCIÓN B: ACULTURACIÓN

Ahora quisiera hacerle algunas preguntas sobre su experiencia cultural. Por cada frase por favor escoja una de las siguientes respuestas: nada, un poco/a veces, algo/moderado, mucho/muy frecuente o muchísimo/casi todo el tiempo. Escoja la respuesta que sería la más correcta en su caso en la mayoría de las situaciones o en condiciones normales.

Entrevistadora - Muestre La Tarjeta B Con Respuestas	Nada	Un poco/ A veces	Algo/ Moderado	Mucho/ Muy frecuente	Muchísimo/ Casi todo el tiempo
1. Yo hablo Español.	1	2	3	4	5
2. Yo hablo Inglés.	1	2	3	4	5
3. Me gusta hablar en Español.	1	2	3	4	5
4. Me asocio con Anglos.	1	2	3	4	5
5. Yo me asocio con Mexicanos o con Mexico-Americanos.	1	2	3	4	5
6. Me gusta escuchar la musica Mexicana.	1	2	3	4	5
7. Me gusta escuchar musica en Inglés.	1	2	3	4	5
8. Me gusta ver programas en la televisión que sean en Español.	1	2	3	4	5
9. Me gusta ver programas en la televisión que sean en Inglés.	1	2	3	4	5
10. Me gusta ver películas en Inglés.	1	2	3	4	5
11. Me gusta ver películas en Español.	1	2	3	4	5
12. Me gusta leer (p.ej., libros en Español).	1	2	3	4	5

	Nada	Un poco/ A veces	Algo/ Moderado	Mucho/ Muy frecuente	Muchísimo/ Casi todo el tiempo
13. Me gusta leer (p.ej., libros en Inglés).	1	2	3	4	5
14. Escribo (p.ej., cartas en Español).	1	2	3	4	5
15. Escribo (p.ej., cartas en Inglés).	1	2	3	4	5
16. Mis pensamientos ocurren en el idioma Inglés.	1	2	3	4	5
17. Mis pensamientos ocurren en el idioma Español.	1	2	3	4	5
18. Mi contacto con Mexico ha sido...	1	2	3	4	5
19. Mi contacto con los Estados Unidos ha sido...	1	2	3	4	5
20. Mi padre se identifica o se identificaba como "Mexicano".	1	2	3	4	5
21. Mi madre se identifica o se identificaba como "Mexicana".	1	2	3	4	5
22. Mis amigos(as) de mi niñez eran de origen Mexicano.	1	2	3	4	5
23. Mis amigos(as) de mi niñez eran Anglos Americanos.	1	2	3	4	5
24. Mi familia cocina comida Mexicana.	1	2	3	4	5
25. Mis amigos recientes son Anglo Americanos.	1	2	3	4	5
26. Mis amigos recientes son Mexicanos o Mexico-Americanos.	1	2	3	4	5

	Nada	Un poco/ A veces	Algo/ Moderado	Mucho/ Muy frecuente	Muchísimo/ Casi todo el tiempo
27. Me gusta identificarme como Mexico-Americana.	1	2	3	4	5
28. Me gusta identificarme como Mexicana.	1	2	3	4	5
29. Me gusta identificarme como Americana.	1	2	3	4	5
30. Me gusta identificarme como Anglo-Americana.	1	2	3	4	5

SECCIÓN B2: TIEMPO ESPECIFICO DE ACULTURACIÓN

Ahora, me gustaria hacerle unas preguntas mas acerca de su cultura.

Entrevistadora - Muestra La Tarjeta B2 Con Respuestas	Solo Espanol	Más Espanol que Inglés	Los dos idiomas	Más Inglés que Espanol	Solo Inglés
1. En los ultimos 30 días, en general cual idioma habló en su casa? Usted diria que:	1	2	3	4	5
2. En los ultimos 30 días, cual fué el idioma hablado en las peliculas y programas de televisión que usted vió?	1	2	3	4	5
3. En los ultimos 30 días, cual fué el idioma de los programas de radio que usted escuchó?	1	2	3	4	5
4. En los ultimos 30 días, las personas que usted visitó o que le han visitado fueron:	1	2	3	4	5
5. En los ultimos 30 días, las reuniones sociales/fiestas en las que usted estuvo fueron:	1	2	3	4	5

APPENDIX M

Religion Measures (English Version)

APPENDIX M

RELIGION MEASURES

Section E2: Religiosity					
Now I would like to ask you about your religious life. Please respond to the following statements by responding never, rarely, sometimes, often or always.					
	Never	Rarely	Sometimes	Often	Always
1. I attend religious crusades, revival meetings or missions.	1	2	3	4	5
2. I attend religious services.	1	2	3	4	5
3. I watch religious services on television.	1	2	3	4	5
4. I pray privately.	1	2	3	4	5
5. I pray with my family.	1	2	3	4	5
6. I listen to religious music.	1	2	3	4	5
7. My religious beliefs have helped me understand my life.	1	2	3	4	5
8. I contribute money to my church.	1	2	3	4	5
9. I take part in various activities offered at my church.	1	2	3	4	5
10. My life is guided by the religious beliefs I learned when I was young.	1	2	3	4	5
11. I feel that religion has helped my relationship with my partner.	1	2	3	4	5
12. I feel that religion has helped me get ahead in life.	1	2	3	4	5
13. My religious beliefs help guide my everyday behavior.	1	2	3	4	5

Section E3: Time Specific Religious Activities

At this time I would like to ask you about the religious activities you have engaged in during the last 30 days.

	Never	1 to 3 times in the last month	Once a week	Several times a week	Daily
1. In the last 30 days, how often did you attend religious services (e.g., mass, bible class)? Would you say:	1	2	3	4	5
2. In the last 30 days, how often did you pray with your family? Would you say:	1	2	3	4	5
3. In the last 30 days, how often did you listen to religious music? Would you say:	1	2	3	4	5
4. In the last 30 days, how often did you contribute money to your church? Would you say:	1	2	3	4	5
5. In the last 30 days, how often did your religious beliefs help you understand your life? Would you say:	1	2	3	4	5

Section E4: Fate Orientation

Now I would like to read to you some statements that people have made about their destiny and HIV/AIDS. I would like you to tell me whether you strongly disagree, disagree, somewhat disagree, somewhat agree, agree, or strongly agree with each statement.

	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
1. I am responsible for what occurs in my life.	1	2	3	4	5	6
2. I have no control over my life because God controls my destiny.	1	2	3	4	5	6
3. I control my destiny, not God.	1	2	3	4	5	6

	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
4. Good things occur in my life because God wills it.	1	2	3	4	5	6
5. It is a matter of chance, if good things happen in my life.	1	2	3	4	5	6
6. It is God's will if bad things happen in my life.	1	2	3	4	5	6
7. If I take the right actions, I can prevent bad things from occurring in my life.	1	2	3	4	5	6
8. I have the ability to make good things happen in my life.	1	2	3	4	5	6
9. I am to blame if I become infected with the AIDS virus.	1	2	3	4	5	6
10. People become infected with HIV because they do not take care of themselves.	1	2	3	4	5	6
11. It is a matter of chance if you become infected with the AIDS virus.	1	2	3	4	5	6
12. I am responsible for not becoming infected with HIV.	1	2	3	4	5	6
13. People can control whether or not they become infected with HIV.	1	2	3	4	5	6

	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
14. If I take the right actions, I can avoid becoming infected with the AIDS virus.	1	2	3	4	5	6
15. If it's meant to be, I will become infected with HIV.	1	2	3	4	5	6
16. People get infected with HIV because God wills it.	1	2	3	4	5	6

APPENDIX N

Religion Measures (Spanish Version)

APPENDIX N

RELIGION MEASURES (SPANISH VERSION)

SECCIÓN E1: FORMACIÓN RELIGIOSA

La siguiente serie de preguntas serán sobre su religión y su iglesia.

1a. ¿Cuál es su denominación religiosa?

- | | | |
|---|--|--|
| ☐ 1. Anglicana | ☐ 6. Evangelista | ☐ 11. Cientología |
| ☐ 2. Bautista | ☐ 7. Luterana | ☐ 12. Otra |
| ☐ 3. Brethren | ☐ 8. Metodista | (Especifique) _____ |
| ☐ 4. Católica | ☐ 9. Mormona | ☐ 13. Ninguna |
| ☐ 5. Iglesia de Dios | ☐ 10. Pentecostal | |

(Entrevistadora - Si la respuesta es “ninguna”, pase a la Sección E2.)

Sección E2: Religiosidad

Ahora me gustaría preguntarle sobre su vida religiosa. Favor de responder a las siguientes frases con nunca, rara vez, a veces, seguido o siempre.

Entrevistadora - Muestre la tarjeta E2 con respuestas.		Nunca	Rara vez	A veces	Seguido	Siempre
2a.	Yo asisto a las cruzadas religiosas, juntas de renacimiento espiritual o misiones.	1	2	3	4	5
2b.	Asisto a servicios religiosos.	1	2	3	4	5
2c.	Miro los servicios religiosos a través de la televisión.	1	2	3	4	5
2d.	Rezo en privado/sola.	1	2	3	4	5
2e.	Rezo con mi familia.	1	2	3	4	5
2f.	Escucho música religiosa.	1	2	3	4	5
2g.	Mis creencias religiosas me han ayudado a comprender mi vida.	1	2	3	4	5
2h.	Doy dinero a mi iglesia.	1	2	3	4	5
2i.	Participo en varias actividades que se ofrecen en mi iglesia.	1	2	3	4	5
2j.	Las creencias religiosas que aprendí de joven son guías en mi vida actualmente.	1	2	3	4	5

2k. Creo que mi religión me ha ayudado en mi relación con mi pareja.	1	2	3	4	5
2l. Siento que mi religion me ha ayudado a avanzar en mi vida.	1	2	3	4	5
2m. Mis creencias religiosas son guias para mi comportamiento diario.	1	2	3	4	5

SECCIÓN E3: TIEMPO ESPECIFICO DE ACTIVIDADES RELIGIOSAS

Ahora me gustaria preguntarle sobre sus actividades religiosas.

Entrevistadora - Muestre la tarjeta E3 con respuestas.					
	Nunca	1 a 3 veces en el ultimo mes	Una vez a la semana	Varias veces a la semana	Diario
3a. ¿En los ultimos 30 dias, con qué frecuencia participó usted en servicios religiosos (p.ej., misa, clase de biblia)? Usted diria qu:	1	2	3	4	5
3b. ¿En los ultimos 30 dias, con qué frecuencia oro/rezo usted con su familia?	1	2	3	4	5
3c. ¿En los ultimos 30 dias, con qué frecuencia escucho usted musica religiosa?	1	2	3	4	5
3d. ¿En los ultimos 30 dias, con qué frecuencia contribuyó usted dinero a su iglesia?	1	2	3	4	5
3e. ¿En los ultimos 30 dias, con qué frecuencia le ayudaron sus creencias religiosas a entender su vida?	1	2	3	4	5

SECCIÓN E4: FATALISMO

Ahora me gustaria leerle algunas declaraciones que han hecho personas en cuanto a su destino y VIH/SIDA. Quiero que me diga si está profundamente en desacuerdo, en desacuerdo, poco en desacuerdo, de acuerdo, o profundamente de acuerdo.

Entrevistadora - Muestre la tarjeta E4 con respuestas.	Profundamente en desacuerdo	En desacuerdo	Poco en desacuerdo	Poco de acuerdo	De acuerdo	Profundamente de acuerdo
--	-----------------------------	---------------	--------------------	-----------------	------------	--------------------------

4a. Yo soy responsable por lo que ocurre en mi vida.	1	2	3	4	5	6
4b. Yo no tengo control sobre mi vida, porque mi destino está en las manos de Dios.	1	2	3	4	5	6
4c. Las cosas buenas que pasan en mi vida, son porque así lo quiere Dios.	1	2	3	4	5	6
4d. Yo tengo control sobre mi destino, no Dios.	1	2	3	4	5	6
4e. Es cuestión del azar, si suceden cosas buenas en mi vida.	1	2	3	4	5	6
4f. Si pasan cosas malas en mi vida, es porque así lo quiere Dios.	1	2	3	4	5	6
4g. Puedo prevenir que me sucedan cosas malas con medidas prácticas.	1	2	3	4	5	6
4h. Tengo la habilidad de hacer que cosas buenas sucedan en mi vida.	1	2	3	4	5	6
4i. Si me infecto con el virus de SIDA es por mi propia culpa.	1	2	3	4	5	6
4j. Quienes contraen VIH es porque no se cuidan.	1	2	3	4	5	6

4k. Es cuestión del azar si uno es infectado con el virus del SIDA.	1	2	3	4	5	6
4l. Soy yo la responsable de no contraer VIH/SIDA.	1	2	3	4	5	6
4m. Las personas pueden controlar si se infectan o no con VIH.	1	2	3	4	5	6
4n. Si tomo las medidas necesarias, puedo prevenir el ser infectada con VIH.	1	2	3	4	5	6
4o. Si es porque me toca, seré infectada con VIH.	1	2	3	4	5	6
4p. Quienes son infectados con VIH es porque así lo quiso Dios.	1	2	3	4	5	6

APPENDIX O

Sexual Gender Norms Measures (English Version)

APPENDIX O

SEXUAL GENDER NORMS MEASURES (ENGLISH VERSION)

SECTION C: SEXUAL GENDER NORMS Now I would like to ask you about your beliefs about how men and women should act. Please tell me which statements best describe what you believe by responding with strongly disagree, disagree, somewhat disagree, somewhat agree, agree or strongly agree.						
	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
1. Women should be virgins until they get married.	1	2	3	4	5	6
2. A woman should ask her partner to use a condom.	1	2	3	4	5	6
3. A woman should know very little about sex until marriage.	1	2	3	4	5	6
4. It is acceptable if a woman does not want to have children.	1	2	3	4	5	6
5. A "good" woman would not have anal sex.	1	2	3	4	5	6
6. A man should determine whether or not birth control is used.	1	2	3	4	5	6
7. A woman that carries condoms in her purse is "loose."	1	2	3	4	5	6
8. It is acceptable for a man to have many sexual partners.	1	2	3	4	5	6
9. It is a woman's responsibility to buy condoms.	1	2	3	4	5	6

	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
10. It is important for a woman to have children.	1	2	3	4	5	6
11. A man should determine how often a couple has sex.	1	2	3	4	5	6
12. It is acceptable for a woman to have many sexual partners.	1	2	3	4	5	6
13. Only "loose" women have oral sex.	1	2	3	4	5	6
14. Birth control should not be used so that a woman can bear her partner many children.	1	2	3	4	5	6
15. A "good" man always uses a condom.	1	2	3	4	5	6
16. It is appropriate for a man to ask his partner for anal sex.	1	2	3	4	5	6
17. A woman should comply with her partner's wishes to have sex.	1	2	3	4	5	6
18. It is disrespectful for a man to talk about sex with a woman.	1	2	3	4	5	6

Section G: Condom Self-Efficacy

Now I would like to ask you some questions about using condoms. For each statement, please tell me which one best describes you by responding never, rarely, sometimes, often or always.

Interviewer - Show Card G With Responses	Never	Rarely	Some- times	Often	Always
1. I feel comfortable asking a new partner to use a condom.	1	2	3	4	5
2. It is difficult for me to ask my boyfriend to use a condom.	1	2	3	4	5
3. Even if I had been drinking I would ask a new partner to use a condom.	1	2	3	4	5
4. I would be able to refuse to have sex with my boyfriend if he would not use a condom.	1	2	3	4	5
5. If I was about to have sex with someone, I would suggest using a condom to protect us both.	1	2	3	4	5
6. I feel comfortable telling a new partner that I will not have sex unless we use a condom.	1	2	3	4	5
7. Even if I had been drinking, I would ask my boyfriend to use a condom.	1	2	3	4	5
8. I would go to a store, ask a clerk for help, if needed, and buy condoms.	1	2	3	4	5
9. If someone I loved complained that he did not like to use a condom, I would be persuaded not to use one.	1	2	3	4	5
10. If I were going on a date and I thought that we might have sex, I would bring a condom with me.	1	2	3	4	5

APPENDIX P

Sexual Gender Norms Measures (Spanish Version)

APPENDIX P

SEXUAL GENDER NORMS MEASURES (SPANISH VERSION)

SECCIÓN C: NORMAS DE IDENTIDAD SEXUAL

Ahora me gustaría hacerle unas preguntas en cuánto a sus creencias sobre como deben actuar los hombres y las mujeres. Favor de decirme cuales de las respuestas mejor define como se siente: profundamente en desacuerdo, en desacuerdo, poco en desacuerdo, poco de acuerdo, de acuerdo o profundamente de acuerdo.

Entrevistadora - Muestre tarjeta C con las respuestas	Profundamente en desacuerdo	En desacuerdo	Poco en desacuerdo	Poco de acuerdo	De acuerdo	Profundamente de acuerdo
1. Las mujeres deben permanecer virgenes hasta casarse.	1	2	3	4	5	6
2. La mujer debe pedirle a su pareja que use un condón.	1	2	3	4	5	6
3. La mujer debe saber poco del sexo hasta el matrimonio.	1	2	3	4	5	6
4. Es aceptable que una mujer no quiera tener hijos.	1	2	3	4	5	6
5. Una mujer “decente” no permitiría sexo anal.	1	2	3	4	5	6
6. Un hombre debe decidir si se usa control de natalidad.	1	2	3	4	5	6
7. Una mujer que carga condones en su bolsa es “fácil”.	1	2	3	4	5	6
8. Es aceptable que un hombre tenga muchas parejas sexuales.	1	2	3	4	5	6
9. Es importante que una mujer tenga hijos.	1	2	3	4	5	6

	Profundamente en desacuerdo	En desacuerdo	Poco en desacuerdo	Poco de acuerdo	De acuerdo	Profundamente de acuerdo
10. Es la responsabilidad de la mujer de comprar los condones.	1	2	3	4	5	6
11. El hombre determina qué frecuente la pareja debe de tener relaciones sexuales.	1	2	3	4	5	6
12. Es aceptable que una mujer tenga muchas parejas sexuales.	1	2	3	4	5	6
13. Solamente las mujeres “fáciles” tienen sexo oral.	1	2	3	4	5	6
14. No se deben usar metodos anticonceptivos para que la mujer le de muchos hijos a su pareja.	1	2	3	4	5	6
15. Un hombre “decente” siempre usa un condón.	1	2	3	4	5	6
16. Es apropiado que un hombre le pida a su pareja que tenga sexo anal.	1	2	3	4	5	6
17. Una mujer debería cumplir con los deseos sexuales de su pareja.	1	2	3	4	5	6
18. Es falta de respeto cuando un hombre habla sobre sexo con una mujer.	1	2	3	4	5	6

Sección G: Condom Self-Efficacy

Ahora me gustaría cambiar el tema y preguntarle del uso de condones. Por cada frase por favor escoja una de las siguientes respuestas: nunca, casi nunca, a veces, seguido o siempre.

Entrevistadora - Muestre la tarjeta G con respuestas.	Nunca	Casi Nunca	A veces	Seguido	Siempre
1. Me sentiría cómoda preguntarle a mi nueva pareja que use un condón.	1	2	3	4	5
2. Tengo dificultad preguntarle a mi novio que use un condón.	1	2	3	4	5
3. Aunque estuviera tomando bebidas alcohólicas, yo le diría a mi nueva pareja que usara un condón.	1	2	3	4	5
4. Yo sería capaz de negarle a mi novio relaciones sexuales si el no usara condón.	1	2	3	4	5
5. Si fuera a tener relaciones sexuales con alguien, yo le sugeriría usar un condón para protegernos.	1	2	3	4	5
6. Me siento cómoda diciéndole a mi nueva pareja que no vamos a tener relaciones sexuales a menos que usemos un condón.	1	2	3	4	5
7. Aunque estuviera tomando bebidas alcohólicas, yo le diría a mi novio que usara un condón.	1	2	3	4	5
8. Yo iría a la tienda, pediría ayuda si fuera necesario, y compraría condones.	1	2	3	4	5
9. Si alguien que yo amo se queja de que no le gusta usar condón, yo no usaría condón.	1	2	3	4	5
10. Si fuera a salir con un hombre y pensara que fuéramos a tener relaciones sexuales, yo me llevaría un condón.	1	2	3	4	5

APPENDIX Q

Gender Norms Incongruency Measure (English Version)

APPENDIX Q

GENDER NORMS INCONGRUENCY MEASURE (ENGLISH VERSION)

SECTION D: GENDER NORMS INCONGRUENCY

Now I would like to ask you a few questions about struggles you may experience as a Mexican or Mexican-American woman. For each statement, please choose one of the following responses: strongly disagree, disagree, somewhat disagree, somewhat agree, agree or strongly agree.

	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
1. I have a difficult time accepting Mexican values about what is appropriate sexual conduct for a woman.	1	2	3	4	5	6
2. I want to be a "good" Mexican woman, but sometimes I feel constrained by Mexican culture.	1	2	3	4	5	6
3. I struggle trying to follow Mexican beliefs about how women should act.	1	2	3	4	5	6
4. Sometimes my desire to be a "good" Mexican woman conflicts with what I want to do sexually.	1	2	3	4	5	6
5. I find my views about the role of women to be in conflict with my cultural background.	1	2	3	4	5	6
6. Sometimes I feel obligated to follow Mexican customs about how women should act even though I disagree with them.	1	2	3	4	5	6

	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
7. Mexican culture limits my ability to do things in my life because I am a woman.	1	2	3	4	5	6
8. Sometimes I feel like experimenting sexually, but my cultural values make it difficult for me to do this.	1	2	3	4	5	6

APPENDIX R

Gender Norms Incongruency Measure (Spanish Version)

APPENDIX R

GENDER NORMS INCONGRUENCY MEASURE (SPANISH VERSION)

SECCIÓN D: GENDER NORM CONGRUENCY

Ahora me gustaría hacerle unas preguntas acerca de su experiencia como una mujer Mexicana o Mexico-Americana. Por cada frase por favor escoja una de las siguientes respuestas: profundamente en desacuerdo, en desacuerdo, poco en desacuerdo, poco de acuerdo, de acuerdo y profundamente de acuerdo.

Entrevistadora- Muestra tarjeta D con las respuestas	<i>Profundamente en desacuerdo</i>	<i>En desacuerdo</i>	<i>Poco en desacuerdo</i>	<i>Poco de acuerdo</i>	<i>De acuerdo</i>	<i>Profundamente de acuerdo</i>
1. Es difícil para mi aceptar la conducta sexual apropiada para una mujer según los valores Mexicanos.	1	2	3	4	5	6
2. Yo quiero ser una Mexicana “decente”, pero a veces me siento limitada por la cultura Mexicana.	1	2	3	4	5	6
3. Es una lucha para mi seguir creencias Mexicanas de cómo una mujer debe actuar.	1	2	3	4	5	6
4. A veces el deseo de ser una Mexicana “decente” conflictúa con lo que quiero ser sexualmente.	1	2	3	4	5	6
5. Mis opiniones de cómo una mujer debe actuar están en contra de la cultura Mexicana.	1	2	3	4	5	6
6. La cultura Mexicana me limita hacer cosas en la vida por ser mujer.	1	2	3	4	5	6

Entrevistadora- Muestra tarjeta D con las respuestas	Profundamente en desacuerdo	En desacuerdo	Poco en desacuerdo	Poco de acuerdo	De acuerdo	Profundamente de acuerdo
7. A veces me siento obligada a seguir costumbres Mexicanas de cómo una mujer debe de actuar aunque estoy en desacuerdo.	1	2	3	4	5	6
8. A veces me gustaria experimentar sexualmente pero mis valores Mexicanos me lo hacen dificil.	1	2	3	4	5	6

APPENDIX S

Sexual Inventory (English Version)

APPENDIX S

SEXUAL INVENTORY (ENGLISH VERSION)

SECTION F1: RELATIONSHIPS IN THE LAST YEAR

Now I would like to ask you about your romantic relationships.

1a. Are you currently in a steady relationship with a man?

☐ 0. No (If "no", go to question 1d.)

☐ 1. Yes

1b. Are you dating or living with this person?

☐ 1. Dating

☐ 2. Living

1c. How long have you been in this relationship? _____ (Go to question 1e)

1d. Are you currently dating?

☐ 0. No

☐ 1. Yes

1e. Have you ever had vaginal sex or vaginal intercourse?

☐ 0. No

☐ 1. Yes

1f. Have you ever had anal sex or anal intercourse - that is when your partner inserts his penis into your bottom, behind or rectum?

☐ 0. No (Interviewer - If respondent has had vaginal intercourse, continue to question 1g.)

If respondent has a boyfriend and has not had **ANY** form of intercourse, go to question 3c, page 15.

If respondent **does not** have a boyfriend and has never had **ANY** form of intercourse, go to Section G, page 33.)

☐ 1. Yes

1g. Have you had vaginal sex or vaginal intercourse in the last 12 months?

☐ 0. No (Interviewer - If no, go to question 1i)

☐ 1. Yes

1h. In the last 12 months, how often have you used a condom during vaginal intercourse? Would you say:

- ☐ 1. Never - 0% of the time
- ☐ 2. Rarely - 25% of the time
- ☐ 3. Sometimes - 50% of the time
- ☐ 4. Most of the time - 75% of the time
- ☐ 5. Always - 100% of the time

1i. Have you had anal sex or anal intercourse in the last 12 months - that is when your partner inserts his penis into your bottom, behind or rectum?

- ☐ 0. No **(Interviewer - If respondent has had vaginal intercourse in the last 12 months, continue to question 1k.)**

If respondent has a boyfriend and has not had ANY form of intercourse in the last 12 months, go to question 3c, page 15.)

- ☐ 1. Yes

1j. In the last 12 months, when you have had anal sex, how often did you use a condom? Would you say:

- ☐ 1. Never - 0% of the time
- ☐ 2. Rarely - 25% of the time
- ☐ 3. Sometimes - 50% of the time
- ☐ 4. Most of the time - 75% of the time
- ☐ 5. Always - 100% of the time

1k. In the last 12 months, how many male sexual partners have you had?

(Interviewer - If participant has had no male partners, go to Section G, page 33.)

1l. Are you currently having sex with more than one person?

- ☐ 0. No **(Interviewer - If "no", go to question 1n.)**
- ☐ 1. Yes

1m. How many sexual partners do you currently have **including** your primary partner (i.e., your boyfriend or a current sexual partner with whom you feel the closest). _____

1n. Now I would like you to think about the last 12 months and the times that you have had an alcoholic beverage. How often did you drink an alcoholic beverage such as beer, wine or liquor (e.g., mixed drinks, shots) before having sex? Would you say:

- ☐ 1. Never (If "never", go to question F2, page 15)
- ☐ 2. Rarely
- ☐ 3. Sometimes
- ☐ 4. Almost half of the time or
- ☐ 5. Almost always

1o. On average during the last 12 months, how many drinks would you say you had before having sex? Would you say:

- ☐ 1. 1-2 drinks
- ☐ 2. 3-4 drinks
- ☐ 3. 5-6 drinks
- ☐ 4. More than 6 drinks

1p. Think about those times that you drank before having sex, how many times were you drunk enough so that you were unable to drive a car or walk straight? Would you say:

- ☐ 1. Never
- ☐ 2. Rarely
- ☐ 3. Sometimes
- ☐ 4. Almost half of the time or
- ☐ 5. Almost always

F2. TRACKING ACROSS THE FOUR DATES

2. Now I would like to ask you about the last 4 times you had sex. I know it may be difficult to remember, but the use of this calendar may help you recall these events. In order for me to keep track, I would like you to tell me the date of each encounter. If you're not sure about the date, give me an estimate of when it occurred. What are the four dates?

Interviewer - If respondent cannot remember the last 4 times she had sex, document the ones that she does remember and for the encounters she cannot recall write down "Cannot remember."

1. _____ 2. _____ 3. _____ 4. _____

2a. How many sexual partners does this represent? _____

F3. PARTNER SEXUAL HISTORY

3a. Now let's take a minute to remember when you had sex on (insert DATE #1). Think about when and where it occurred. On this date did you have sex with :

- ☐ 1. Your boyfriend
- ☐ 2. Someone you are (were) dating
- ☐ 3. A casual sexual partner or
- ☐ 4. Someone else (**Specify**) _____

3b. Did you have sex with more than one person on this date?

- ☐ 0. No
- ☐ 1. Yes (**Interviewer - If yes, go to Insert A**)

3c. **Interviewer -**

If respondent has not had sex, but has a boyfriend, please ask :
What is your boyfriend's ethnicity?

If you are asking respondent about the last time she had sex, please ask: What is the ethnicity of the person you last had sex with?

- | | |
|---|---|
| ☐ 1. Asian/ Pacific Islander | ☐ 4. Native American |
| ☐ 2. African-American/ Black | ☐ 5. White/ Caucasian |
| ☐ 3. Latino/ Hispanic | ☐ 6. Other(Specify) _____ |

3d. To the best of your knowledge is (was) the person you last had sex with having sex with another person?

- ☐ 0. No - **Go to question 3f**
- ☐ 1. Yes - **Go to question 3e.**
- ☐ 2. Doesn't know - **Go to question 3f**
- ☐ 3. Not sure - **Go to question 3f**

3e. As far as you know, does (did) he use a condom when he has (had) sex with these other people?

- ☐ 0. No
- ☐ 1. Yes
- ☐ 2. Doesn't know
- ☐ 3. Not sure

3f. To the best of your knowledge has he been tested for the AIDS virus?

- ☐ 0. No- - **Go to question 3h**
- ☐ 1. Yes - **Go to question 3g**
- ☐ 2. Doesn't know - **Go to question 3h**
- ☐ 3. Not sure - **Go to question 3h**

3g. Did the test show that he was HIV positive?

- ☐ 0. No
- ☐ 1. Yes
- ☐ 2. Doesn't know
- ☐ 3. Not sure

3h. To the best of your knowledge has he been tested for STDs (i.e., sexually transmitted diseases)?

- ☐ 0. No - **Go to question 3j**
- ☐ 1. Yes - **Go to question 3i**
- ☐ 2. Doesn't know - **Go to question 3j**
- ☐ 3. Not sure - **Go to question 3j**

3i. Did any of the tests show that he was infected with an STD?

- ☐ 0. No
- ☐ 1. Yes
- ☐ 2. Doesn't know
- ☐ 3. Not sure

3j. To the best of your knowledge has he injected drugs with a needle that were not prescribed by a doctor?

- ☐ 0. No
- ☐ 1. Yes
- ☐ 2. Doesn't know
- ☐ 3. Not sure

3k. To the best of your knowledge has he had a blood transfusion between the years 1977 and 1985?

- ☐ 0. No
- ☐ 1. Yes
- ☐ 2. Doesn't know
- ☐ 3. Not sure

3l. To the best of your knowledge does he have sex with other men?

- ☐ 0. No
- ☐ 1. Yes
- ☐ 2. Doesn't know
- ☐ 3. Not sure

3m. To the best of your knowledge has he been in jail?

- ☐ 0. No
- ☐ 1. Yes
- ☐ 2. Doesn't know
- ☐ 3. Not sure

F4. PARTNER'S SEXUAL GENDER NORMS

Now for each of the following statements, I would like you to tell me which answer best describes what this partner believes about men and women. Please use the following responses: strongly disagree, disagree, somewhat disagree, somewhat agree, agree or strongly agree.

	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
1. Women should be virgins until they get married.	1	2	3	4	5	6
2. A woman should ask her partner to use a condom.	1	2	3	4	5	6
3. A woman should know very little about sex until marriage.	1	2	3	4	5	6
4. It is acceptable if a woman does not want to have children.	1	2	3	4	5	6
5. A "good" woman would not have anal sex.	1	2	3	4	5	6
6. A man should determine whether or not birth control is used.	1	2	3	4	5	6
7. A woman that carries condoms in her purse is "loose."	1	2	3	4	5	6
8. It is acceptable for a man to have many sexual partners.	1	2	3	4	5	6
9. It is a woman's responsibility to buy condoms.	1	2	3	4	5	6
10. It is important for a woman to have children.	1	2	3	4	5	6

11. A man should determine how often a couple has sex.	1	2	3	4	5	6
12. It is acceptable for a woman to have many sexual partners.	1	2	3	4	5	6
13. Only "loose" women have oral sex.	1	2	3	4	5	6
14. Birth control should not be used so that a woman can bear her partner many children.	1	2	3	4	5	6
15. A "good" man always uses a condom.	1	2	3	4	5	6
16. It is appropriate for a man to ask his partner for anal sex.	1	2	3	4	5	6
17. A woman should comply with her partner's wishes to have sex.	1	2	3	4	5	6
18. It is disrespectful for a man to talk about sex with a woman.	1	2	3	4	5	6

F5. USE OF CONDOMS

5a. Interviewer - If respondent has not had ANY form of sex, go to Section G, pg. 33. If respondent has had sex, continue with this line of questioning.

Now I would like to ask you some specific questions about your sexual encounter on this date. How many times did you have vaginal intercourse during this sexual encounter? _____

5b Of those times, how many times did you use a condom? _____

5c. Were there any times during this encounter when there was penetration (i.e., penis entering the vagina) without the use of a condom?

☐ 0. No - **Go to question 5f.**

☐ 1. Yes

5d. Did he ejaculate inside of your vagina? ☐ 0. No - Go to question 5f. ☐ 1. Yes
5e. How many times did this occur? _____
5f. How many times did you have anal sex during this sexual encounter? _____ (Interviewer - If participant did not have anal sex, go to question 6a.)
5g. Of those times, how many times did you use a condom? _____
5h. Were there any times during this encounter when there was penetration (i.e., penis entering the anus/rectum) without the use of a condom? ☐ 0. No - Go to question 6a. ☐ 1. Yes
5i. Did he ejaculate inside of your anus/rectum? ☐ 0. No - Go to question 6a. ☐ 1. Yes
5j. How many times did this occur? _____
F6. USE OF ALCOHOL
6a. On this date did you drink an alcoholic beverage such as beer, wine or liquor (e.g., mixed drinks, shots) before having sex? ☐ 0. No Interviewer - If respondent answered "no", go to bottom of the page to ☐ INTERVIEWER ☐ 1. Yes
6b. How many drinks did you have? Would you say: ☐ 1. 1-2 drinks ☐ 2. 3-4 drinks ☐ 3. 5-6 drinks ☐ 4. More than 6 drinks
6c. Were you drunk enough so that you were unable to drive a car or walk straight? ☐ 0. No ☐ 1. Yes

APPENDIX T:
Sexual Inventory (Spanish Version)

APPENDIX T

SEXUAL INVENTORY (SPANISH VERSION)

<u>SECCIÓN F1: RELACIONES EN EL ULTIMO AÑO</u> Ahora me gustaria preguntarle sobre sus relaciones amorosas / romanticas.	
1a.	¿Actualmente está en una relación amorosa con alguien? ☐ 0. No (Entrevistadora - Si la participante dice “no” pase a la pregunta 1d.) ☐ 1. Si
1b.	¿Está saliendo o viviendo con esta persona? ☐ 1. Saliendo ☐ 2. Viviendo
1c.	¿Cuanto tiempo tiene en esta relación? _____ (Pase a la pregunta 1e)
1d.	¿Actualmante estas noviando? ☐ 0. No ☐ 1. Si
1e.	¿Alguna vez ha tenido relación sexual? ☐ 0. No ☐ 1. Si
1f.	¿Alguna vez ha tenido sexo anal o coito anal - es decir cuando su pareja introduce su pene en tu ano, trasero o recto? ☐ 0. No (Entrevistadora - Si la entrevistada ha tenido relación sexual vaginal, pase a la pregunta 1g. Si la entrevistada tiene novio y no ha tenido <i>NINGUNA</i> clase de relación sexual, pase a la pregunta 3c, pagina 16. Si la entrevistada no tiene novio y <i>NUNCA</i> ha tenido ninguna clase de relación sexual, pase a la sección G, pagina 36.) ☐ 1. Si
1g.	¿En los ultimos 12 meses, ha tenido relación sexual? ☐ 0. No (Entrevistadora - Si la respuesta es “no”, pase a la pregunta 1i) ☐ 1. Si

1h. ¿En los últimos 12 meses, con qué frecuencia a usado un condón durante sexo vaginal? Usted diría: **(Entrevistadora- Muestre la tarjeta F1h con las respuestas)**

- ☐ 1. Nunca - 0% de las veces
- ☐ 2. Rara vez- 25% de las veces
- ☐ 3. A veces - 50% de las veces
- ☐ 4. La mayoría del tiempo - 75% de las veces
- ☐ 5. Siempre - 100% de las veces

1i. ¿En los últimos 12 meses, ha tenido sexo anal o coito anal - es decir cuando su pareja introduce su pene en tu ano, trasero o recto?

- ☐ 0. No **(Entrevistadora - Si la entrevistada ha tenido relación sexual vaginal en los últimos 12 meses, pase a la pregunta 1k. Si la entrevistada tiene novio y no ha tenido *NINGUNA* clase de relación sexual, pase a la pregunta 3c, pagina 16.**
- ☐ 1. Si

1j. ¿En los últimos 12 meses, con qué frecuencia a usado un condon durante sexo anal? Usted diría que: **(Entrevistadora- Muestre la tarjeta F1j con las respuestas)**

- ☐ 1. Nunca - 0% de las veces
- ☐ 2. Rara vez- 25% de las veces
- ☐ 3. A veces - 50% de las veces
- ☐ 4. La mayoría de el tiempo - 75% de las veces
- ☐ 5. Siempre - 100% de las veces

1k. ¿En los últimos 12 meses, aproximadamente cuantas parejas sexuales ha tenido?_____

(Entrevistadora - Si la participante dice “ninguno” pase a la sección G, pagina 36.)

1l. ¿Tiene actualmente relaciones sexuales con más de una persona?

- ☐ 0. No **(Entrevistadora - Si la respuesta es “no”, pase a la pregunta 1n)**
- ☐ 1. Si

1m. ¿Actualmente cuantas parejas sexuales tiene incluyendo a su pareja principal (i.e., tu novio o la pareja actual con quien se sente más cercas).

1n. Ahora me gustaría que piense sobre los últimos 12 meses y las veces que tomo alcohol antes de tener sexo. ¿Con qué frecuencia tomó una bebida alcohólica (P.ej., cerveza, vino, licor, tragos) antes de tener sexo? (**Entrevistadora - Muestre la tarjeta F1n con las respuestas.**) Usted diría que:

- ☐ 1. Nunca (Si la respuesta es “nunca”, pase a la pregunta F2, pagina 16.)
- ☐ 2. Rara vez
- ☐ 3. A veces
- ☐ 4. La mitad de veces
- ☐ 5. Casi siempre

1o. Por lo normal, durante los últimos doce meses, ¿cuántas bebidas alcoholicas diría que consumió antes de tener sexo? (**Entrevistadora - Muestre la tarjeta F1o con las respuestas.**) Usted diría que:

- ☐ 1. 1-2 bebidas
- ☐ 2. 3-4 bebidas
- ☐ 3. 5-6 bebidas
- ☐ 4. Más de 6 bebidas

1p. Piense en aquellas veces que tomó antes de tener sexo, ¿cuántas de esas veces estuvo tan tomada (borracha) que no pudo manejar un carro o caminar derecho? (**Entrevistadora - Muestre la tarjeta F1p con las respuestas**) Usted diría que:

- ☐ 1. Nunca
- ☐ 2. Rara vez
- ☐ 3. A veces
- ☐ 4. La mitad de veces
- ☐ 5. Casi siempre

F2. TRACKING

2. Ahora me gustaria preguntarle acerca de las ultimas 4 veces que usted tuvo relaciones sexuales. Reconozco que quizás es difícil acordarte, pero el uso de este calendario puede ayudarle a recordar esos eventos. Para yo poder continuar en curso, me gustaria que usted me diga la fecha de cada encuentro. Si usted no está segura de la fecha, por favor deme un aproximado de cuando ocurrió. ¿Cuales son las cuatro citas?

Entrevistadora - Si la entrevistada no puede recordar las ultimas cuatro veces que tuvo relaciones sexuales, documente las que si se acuerda y por los encuentros que no recuerda escriba “No recuerdo”

1. _____ 2. _____ 3. _____ 4. _____

2a. ¿Esto representa cuantos parejas sexuales? _____

F3. INFORMACION BASICA ACERCA DE SU PAREJA

3a. Ahora vamos a tomar un minuto para recordar cuando tuvo relaciones sexuales **(Insert first date)**. Piense en cuando y dónde ocurrió. En esta fecha usted tuvo relación sexual con:

- ☐ 1. Su novio
- ☐ 2. Alguien que usted esta (estaba) viendo
- ☐ 3. Alguien casual
- ☐ 4. Alguien mas **(Especifique)**_____

3b. Usted tuvo relaciones sexuales con más de una persona en esta fecha?

- ☐ 0. No
- ☐ 1. Si **(Entrevistadora - Si la respuesta es "sí", pase al encarte A)**

3c. **Entrevistadora -**

Si la entrevistada no ha tenido relaciones sexuales, pero tiene novio por favor de preguntarle:

¿Cual es el origen étnico (racial) de su novio?

Si estas preguntando de la ultima vez que tuvo relaciones sexuales, favor de preguntarle:

¿Cual es el origen étnico (racial) de la ultima persona con quien tuvo relación sexual?

- | | |
|--|---|
| ☐ 1. Asiático/de las Islas del Pacifico | ☐ 4. Nativo Americano |
| ☐ 2. Afro-Americano/ Negro | ☐ 5. Blanco/Anglo-Americano |
| ☐ 3. Latino/ Hispano | ☐ 6. Otro (Especifique) _____ |

3d. ¿Que usted sepa, actualmente tiene relación sexual su pareja con otra persona?

- ☐ 0. No - **Pase a la pregunta 3f**
- ☐ 1. Sí - **Pase a la pregunta 3e**
- ☐ 2. No sé - **Pase a la pregunta 3f**
- ☐ 3. No estoy segura - **Pase a la pregunta 3f**

3e. ¿Que usted sepa, usa condón su pareja con esa persona?

- ☐ 0. No
- ☐ 1. Sí
- ☐ 2. No sé
- ☐ 3. No estoy segura

3f. ¿Que usted sepa, ha sido su pareja alguna vez examinado para ver si tiene el virus del SIDA (tambien llamado VIH)?

- ☐ 0. No - **Pase a la pregunta 3h**
- ☐ 1. Sí - **Pase a la pregunta 3g**
- ☐ 2. No sé - **Pase a la pregunta 3h**
- ☐ 3. No estoy segura - **Pase a la pregunta 3h**

3g. ¿Que usted sepa, fue positivo su análisis de VIH/SIDA? ☐ 0. No ☐ 1. Sí ☐ 2. No sé ☐ 3. No estoy segura
3h. ¿Que usted sepa, ha sido su pareja alguna vez examinado para ver si tiene enfermedades transmitidas sexualmente? ☐ 0. No - Pase a la pregunta 3j ☐ 1. Sí - Pase a la pregunta 3i ☐ 2. No sé - Pase a la pregunta 3j ☐ 3. No estoy segura - Pase a la pregunta 3j
3i. ¿Cualquiera de estas examinaciones indicaron que el fué infectado? ☐ 0. No ☐ 1. Sí ☐ 2. No sé ☐ 3. No estoy segura
3j. ¿Que usted sepa, su pareja se ha inyectado drogas que no han sido prescritas por un doctor? ☐ 0. No ☐ 1. Sí ☐ 2. No sé ☐ 3. No estoy segura
3k. ¿Que usted sepa, ha tenido su pareja una transfusión de sangre entre los años 1977 y 1985? ☐ 0. No ☐ 1. Sí ☐ 2. No sé ☐ 3. No estoy segura
3l. ¿Que usted sepa, tiene su pareja relaciones sexuales con otros hombres? ☐ 0. No ☐ 1. Sí ☐ 2. No sé ☐ 3. No estoy segura
3m. ¿Que usted sepa, su pareja ha estado en la cárcel? ☐ 0. No ☐ 1. Sí ☐ 2. No sé ☐ 3. No estoy segura

F4. NORMAS DE IDENTIDAD SEXUAL DE SU PAREJA

Ahora favor de decirme cuales de las respuestas mejor define como se siente su pareja sobre como deben actuar los hombres y las mujeres. Quiero que me diga si el esta profundamente en desacuerdo, en desacuerdo, poco en desacuerdo, poco de acuerdo, de acuerdo, o profundamente de acuerdo.

Entrevistadora - Muestre tarjeta F4 con las respuestas	Profundamente en desacuerdo	En desacuerdo	Poco en desacuerdo	Poco de acuerdo	De acuerdo	Profundamente de acuerdo
4a. Las mujeres deben permanecer virgenes hasta casarse.	1	2	3	4	5	6
4b. La mujer debe pedirle a su pareja que use un condón.	1	2	3	4	5	6
4c. La mujer debe saber poco del sexo hasta el matrimonio.	1	2	3	4	5	6
4d. Es aceptable que una mujer no quiera tener hijos.	1	2	3	4	5	6
4e. Una mujer “decente” no permitiría sexo anal.	1	2	3	4	5	6
4f. El hombre debe decidir si se usa control de natalidad.	1	2	3	4	5	6
4g. Una mujer que carga condones en su bolsa es “fácil”.	1	2	3	4	5	6
4h. Es aceptable que un hombre tenga muchas parejas sexuales.	1	2	3	4	5	6
4i. Es la responsabilidad de la mujer de comprar los condones.	1	2	3	4	5	6

4j. Es importante que una mujer tenga hijos.	1	2	3	4	5	6
4k. Un hombre determina qué frecuente la pareja debe de tener relaciones sexuales.	1	2	3	4	5	6
4l. Es aceptable que una mujer tenga muchas parejas sexuales.	1	2	3	4	5	6
4m. Solamente las mujeres “faciles” tienen sexo oral.	1	2	3	4	5	6
4n. No se debe de usar ningun metodo anticonceptivo para que la mujer lé de muchos hijos a su pareja.	1	2	3	4	5	6
4o. Un hombre “decente” siempre usa un condón.	1	2	3	4	5	6
4p. Es apropiado que un hombre le pida a su pareja que tenga sexo anal.	1	2	3	4	5	6
4q. Una mujer debería cumplir con los deseos sexuales de su pareja.	1	2	3	4	5	6
4r. Es falta de respeto cuando un hombre habla sobre sexo con una mujer.	1	2	3	4	5	6

F5. USO DE CONDONES

5a. **Entrevistadora - Si la respondiente nunca ha tenido NINGUNA forma de sexo, siga a la Sección G, pagina 36.**

Si la respondiente ha tenido sexo, continúe con ésta línea de preguntas.

Ahora quiero preguntarle acerca de su encuentro sexual en esta fecha. ¿Cuántas veces tuvo relaciones vaginales durante este encuentro sexual? _____

5b. ¿De esas veces, cuántas veces uso un condón? _____

5c. ¿Alguna vez durante este encuentro hubo penetración (es decir cuando el pene entra la vagina) sin el uso de un condón?

☐ 0. No - **Pase a la pregunta 5f**

☐ 1. Sí

5d. ¿Eyaculó el adentro de su vagina?

☐ 0. No - **Pase a la pregunta 5f**

☐ 1. Sí

5e. ¿Cuántas veces ocurrió esto? _____

5f. ¿Cuántas veces tuvo sexo anal durante este encuentro sexual? _____
(Entrevistadora - Si la participante no tuvo sexo anal, pase a la pregunta 6a.)

5g. ¿De estas veces, cuántas veces uso un condón? _____

5h. ¿Alguna vez durante este encuentro hubo penetración (es decir cuando el pene entra el recto) sin el uso de un condón?

☐ 0. No - **Pase a la pregunta 6a**

☐ 1. Sí

5i. ¿Eyaculó el adentro de su recto?

☐ 0. No - **Pase a la pregunta 6a**

☐ 1. Sí

5j. ¿Cuántas veces ocurrió esto? _____

F6. USO DE ALCOHOL

6a. ¿En este encuentro, tomó alguna bebida alcohólica (p.ej. cerveza, vino, licor, tragos) antes de tener sexo?

☐ 0. No (Entrevistadora - Si la respuesta es “no”, pase a la caja ☐ Entrevistadora que sigue.)

☐ 1. Sí

6b. ¿Cuántas bebidas tomo? (**Entrevistadora - Muestre tarjeta F6b con las respuestas**) Usted diría que:

- ☐ 1. 1-2 bebidas
- ☐ 2. 3-4 bebidas
- ☐ 3. 5-6 bebidas
- ☐ 4. Más de 6 bebidas

6c. ¿Estuvo tan tomada (borracha) que no pudo manejar un carro o caminar derecho?

- ☐ 0. No
- ☐ 1. Sí

☐ **ENTREVISTADORA - Si la respondiente sólo pudo acordarse de un encuentro sexual, marque la caja a la izquierda y sigue a la Sección G en la pagina 36. Si esto no le pertenece, siga a la pregunta 7a.**

APPENDIX U

Multiple Partners Insert (English Version)

APPENDIX U

MUTIPLE PARTNERS INSERT (ENGLISH VERSION)

Subject ID#:

Date of sexual encounter:

Partner #:

Insert A

1. How many sexual partners did you have on this date? _____
Interviewer - If this is the first sexual encounter discussed go to question 3.

2. Are any of these individuals, someone you had sex with on the previous occasion(s) you cited?
☐ 0. No
☐ 1. Yes

Interviewer - Ask respondent this series of questions for each partner she identified for this particular encounter. Do not document this information for a partner she previously had sex with. Use a new Insert A for each partner she identifies for this particular encounter and answer questions 3b-8r.

3. **If only one additional partner:** Now I would like to ask you a few questions about this additional partner. What is the ethnicity of this person?
☐ 1. Asian/ Pacific Islander ☐ 4. Native American
☐ 2. African-American/ Black ☐ 5. White/ Caucasian
☐ 3. Latino/ Hispanic ☐ 6. Other(Specify)

Interviewer - Go to question 4.

3a. **If more than one additional partner:** Now I would like to ask you a few questions about these additional partners. In order for me to keep track, each time we talk about a new partner from this encounter, I would like you to tell me the age of that specific partner. If you're not sure about their age, give me an estimate.

Ages: 1. _____ 2. _____ 3. _____ 4. _____

3b. What is the ethnicity of the partner who is (<i>insert age</i>)? ☐ 1. Asian/ Pacific Islander ☐ 4. Native American ☐ 2. African-American/ Black ☐ 5. White/ Caucasian ☐ 3. Latino/ Hispanic ☐ 6. Other(Specify) _____	
4. To the best of your knowledge is (was) he having sex with another person? ☐ 0. No - Go to question 6 ☐ 1. Yes - Go to question 5 ☐ 2. Doesn't know - Go to question 6 ☐ 3. Not sure - Go to question 6	
5. As far as you know, does (did) he use a condom when he has (had) sex with these other people? ☐ 0. No ☐ 1. Yes ☐ 2. Doesn't know ☐ 3. Not sure	
6. To the best of your knowledge has he been tested for the AIDS virus? ☐ 0. No - Go to question 8 ☐ 1. Yes - Go to question 7 ☐ 2. Doesn't know - Go to question 8 ☐ 3. Not sure - Go to question 8	
7. Did the test show that he was HIV positive? ☐ 0. No ☐ 1. Yes ☐ 2. Doesn't know ☐ 3. Not sure	
8. To the best of your knowledge has he been tested for STDs (i.e., sexually transmitted diseases)? ☐ 0. No - Go to question 10 ☐ 1. Yes - Go to question 9 ☐ 2. Doesn't know - Go to question 10 ☐ 3. Not sure - Go to question 10	
9. Did any of the tests show that he was infected with an STD? ☐ 0. No ☐ 1. Yes ☐ 2. Doesn't know ☐ 3. Not sure	

10. To the best of your knowledge has he injected drugs with a needle that were not prescribed by a doctor? ☐ 0. No ☐ 1. Yes ☐ 2. Doesn't know ☐ 3. Not sure																												
11. To the best of your knowledge has he had a blood transfusion between the years 1977 and 1985? ☐ 0. No ☐ 1. Yes ☐ 2. Doesn't know ☐ 3. Not sure																												
12. To the best of your knowledge does he have sex with other men? ☐ 0. No ☐ 1. Yes ☐ 2. Doesn't know ☐ 3. Not sure																												
13. To the best of your knowledge has he been in jail? ☐ 0. No ☐ 1. Yes ☐ 2. Doesn't know ☐ 3. Not sure																												
14. PARTNER'S SEXUAL GENDER NORMS Now for each of the following statements, I would like you to tell me which answer best describes what this partner believes about men and women. Please use the following responses: strongly disagree, disagree, somewhat disagree, somewhat agree, agree or strongly agree.																												
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%; padding: 5px;">Interviewer - Show Card 14A with responses</th> <th style="width: 10%; padding: 5px;">Strongly Disagree</th> <th style="width: 10%; padding: 5px;">Disagree</th> <th style="width: 10%; padding: 5px;">Somewhat Disagree</th> <th style="width: 10%; padding: 5px;">Somewhat Agree</th> <th style="width: 10%; padding: 5px;">Agree</th> <th style="width: 10%; padding: 5px;">Strongly Agree</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">a. Women should be virgins until they get married.</td> <td style="text-align: center; padding: 5px;">1</td> <td style="text-align: center; padding: 5px;">2</td> <td style="text-align: center; padding: 5px;">3</td> <td style="text-align: center; padding: 5px;">4</td> <td style="text-align: center; padding: 5px;">5</td> <td style="text-align: center; padding: 5px;">6</td> </tr> <tr> <td style="padding: 5px;">b. A woman should ask her partner to use a condom.</td> <td style="text-align: center; padding: 5px;">1</td> <td style="text-align: center; padding: 5px;">2</td> <td style="text-align: center; padding: 5px;">3</td> <td style="text-align: center; padding: 5px;">4</td> <td style="text-align: center; padding: 5px;">5</td> <td style="text-align: center; padding: 5px;">6</td> </tr> <tr> <td style="padding: 5px;">c. A woman should know very little about sex until marriage.</td> <td style="text-align: center; padding: 5px;">1</td> <td style="text-align: center; padding: 5px;">2</td> <td style="text-align: center; padding: 5px;">3</td> <td style="text-align: center; padding: 5px;">4</td> <td style="text-align: center; padding: 5px;">5</td> <td style="text-align: center; padding: 5px;">6</td> </tr> </tbody> </table>	Interviewer - Show Card 14A with responses	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree	a. Women should be virgins until they get married.	1	2	3	4	5	6	b. A woman should ask her partner to use a condom.	1	2	3	4	5	6	c. A woman should know very little about sex until marriage.	1	2	3	4	5	6
Interviewer - Show Card 14A with responses	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree																						
a. Women should be virgins until they get married.	1	2	3	4	5	6																						
b. A woman should ask her partner to use a condom.	1	2	3	4	5	6																						
c. A woman should know very little about sex until marriage.	1	2	3	4	5	6																						

d. It is acceptable if a woman does not want to have children.	1	2	3	4	5	6
e. A “good” woman would not have anal sex.	1	2	3	4	5	6
f. A man should determine whether or not birth control is used.	1	2	3	4	5	6
g. A woman that carries condoms in her purse is “loose.”	1	2	3	4	5	6
h. It is acceptable for a man to have many sexual partners.	1	2	3	4	5	6
i. It is a woman’s responsibility to buy condoms.	1	2	3	4	5	6
j. It is important for a woman to have children.	1	2	3	4	5	6
k. A man should determine how often a couple has sex.	1	2	3	4	5	6
l. It is acceptable for a woman to have many sexual partners.	1	2	3	4	5	6
m. Only “loose” women have oral sex.	1	2	3	4	5	6
n. Birth control should not be used so that a woman can bear her partner many children.	1	2	3	4	5	6
o. A “good” man always uses a condom.	1	2	3	4	5	6

p.	It is appropriate for a man to ask his partner for anal sex.	1	2	3	4	5	6
q.	A woman should comply with her partner's wishes to have sex.	1	2	3	4	5	6
r.	It is disrespectful for a man to talk about sex with a woman.	1	2	3	4	5	6

When you are done obtaining information about her partners for this particular sexual encounter, return to the main questionnaire.

If you are discussing: sexual encounter #1, return to page 18, Section F5.
sexual encounter #2, return to page 23, Section F9.
sexual encounter #3, return to page 27, Section F13.
sexual encounter #4, return to page 32, Section F17.

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